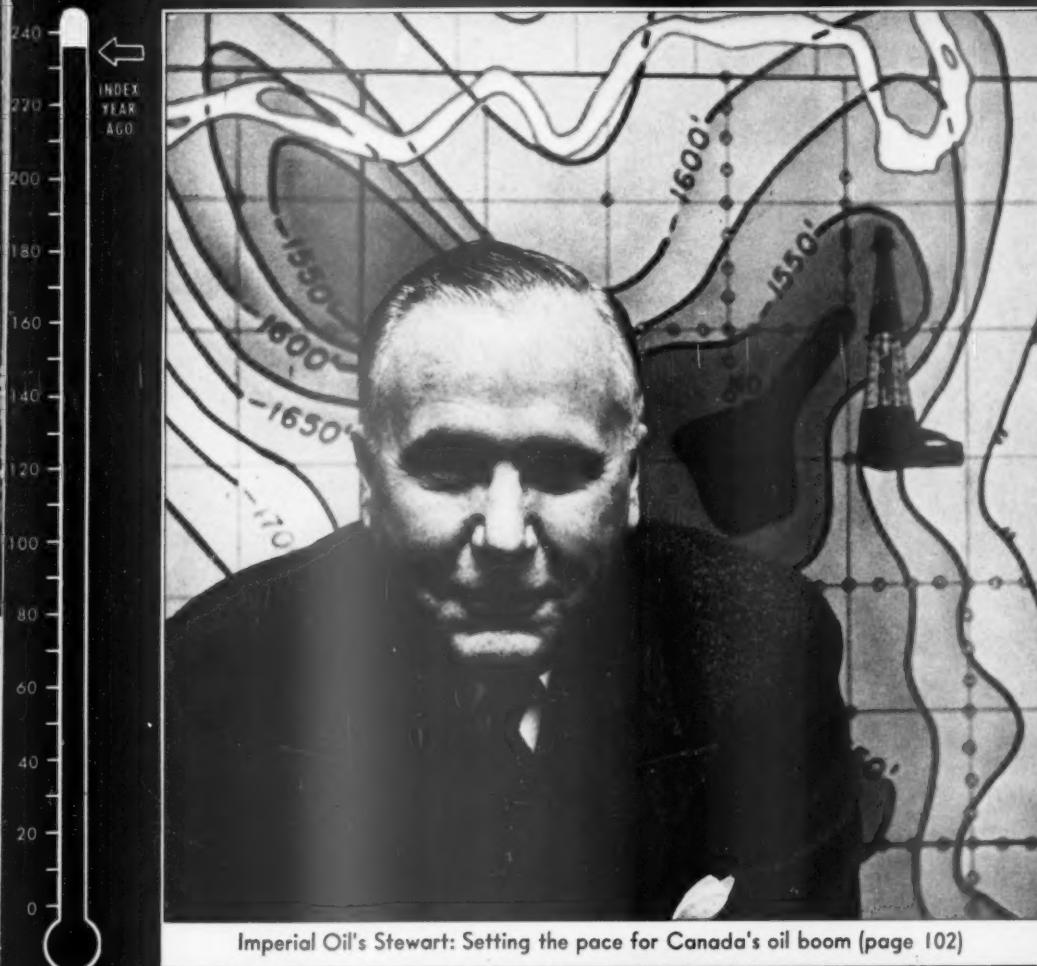


BUSINESS WEEK

WHAT IT TAKES TO BE A
Company Boss

PAGE 112



A McGRAW-HILL PUBLICATION

JAN. 26, 1952

TWENTY-FIVE CENTS



LADISH

Controlled Quality
PIPE FITTINGS

**maximum service
assured
by metallurgical
soundness**

Sound metallurgy . . . the result of unsurpassed facilities and advanced laboratory controls . . . provides the maximum of dependability in Ladish Controlled Quality fittings. Every phase of metal quality . . . composition, structure and physical properties . . . is continuously safeguarded—and certified proof of metallurgical integrity is available to users of Ladish fittings.



TO MARK PROGRESS

THE COMPLETE *Controlled Quality* FITTINGS LINE
PRODUCED UNDER ONE ROOF...ONE RESPONSIBILITY

LADISH CO.

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St. Louis • Atlanta • Houston • Tulsa • Los Angeles • Havana • Toronto • Mexico City

RESEARCH KEEPS

B.F. Goodrich

FIRST IN RUBBER



Photo courtesy Sperry Products, Inc., Danbury, Conn.

Rubber helps "track walker" see through steel

A typical example of B. F. Goodrich improvement in rubber

THIS car inspects more railroad track in a day than a man on foot could cover in a week. And it checks both rails at once—with X-ray eyes that can "see" right through the steel.

But the belts which drive a pair of big electric generators in the car once caused a serious problem. With heavy equipment in such small space there wasn't room to adjust the tension of the belts. The slightest stretch or slip set off a chain reaction of trouble because the generators were affected. This in turn spoiled the vision of the X-ray eyes. Ordinary V belts stretched badly;

replacement was frequent and costly.

A distributor suggested B. F. Goodrich grommet V belts. When installed, the grommet belts were found to give 3 times the service of other belts. Now, belt costs are cut; repair and maintenance time has been cut by 60 per cent.

A grommet is a tension member inside the belt. It's made like a giant cable except that it is endless—a cord loop made by winding heavy cord on itself. There are two grommets in B. F. Goodrich V belts. They stand the shocks and heavy loads, help prevent

stretching, also make the belt flexible.

The grommet belt is typical of BFG product improvement—and savings to industry. If you use V belts or other industrial rubber goods, see your BFG distributor and learn what B. F. Goodrich research may have done to improve the kind of products you need. *The B. F. Goodrich Company, Industrial & General Products Division, Akron, Ohio.*

B.F. Goodrich
RUBBER FOR INDUSTRY

**Don't buy
five machines
when two
will do the job—
BETTER!**

● Let's say you received a defense order in 1941 that required purchasing 5 turret lathes.

Today, when you receive a similar order, it might be quite natural for you to assume you'd again need 5 machines. But just as weapons or products have developed, so have the tools with which they're made.

In many cases these products can be made faster and more profitably with Warner & Swasey automatics—machines developed since the last war. Instead of reordering, say, 5 turret lathes, you may need only 2 of these automatics. They'll cost you less in total investment, require less floor space and fewer operators, and turn out more uniform parts at a higher rate.

Of course, there are—and always will be—many jobs that should be done *only* on turret lathes. But before you simply reorder according to your past requirements, first call in your nearest Warner & Swasey Field Representative. He may be able to show you how you can boost your production and profits with Warner & Swasey automatics.



Warner & Swasey 5-Spindle Automatic Bar Machine,
one of Warner & Swasey's line of automatic machines.

YOU CAN PRODUCE IT BETTER, FASTER, FOR LESS WITH WARNER & SWASEY MACHINE TOOLS, TEXTILE MACHINERY, CONSTRUCTION MACHINERY



Case of the Civilian Bazooka...

*New Furnace Tapper
Serves Steel Industry*



STEELMAKERS now tap open-hearth furnaces more efficiently with a Jet Tapper—based on the armor-piercing principle of the bazooka. When the tapper is placed in the furnace tap hole and detonated electrically, a "shaped charge" destroys the plug releasing the molten metal.

It's a job that calls for *exacting* heat-control under tough conditions. So, the tapper's bullet-like case is made of Kaylo hydrous calcium silicate—the *only* material which meets the rigid requirements. This incombustible insulating material shields the explosive charge from intense furnace heat. Tapping is then done *safely* by remote control.

Kaylo calcium silicate, introduced in 1943 by Owens-Illinois, has many other outstanding qualities. It is insoluble in water; has dimensional stability, high strength and light weight—qualities reflected in Kaylo building and insulating products and available to you for your products.

FREE BOOKLET—For "The Story of Kaylo", write Dept. N-315 Owens-Illinois Glass Company, Kaylo Division, Toledo 1, Ohio.

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...pioneered by OWENS-ILLINOIS Glass Company

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KAYLO
HEAT INSULATION



KAYLO INSULATING
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KAYLO FIREDOORS

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BUSINESS WEEK • Jan. 26, 1952

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- A big appliance manufacturer cut handling costs 65%
- 75% of floor area saved with high stacking
- Breakage eliminated in a bottled goods plant
- Carloads of steel unloaded in 1 1/4 hours — an 87% saving
- A retail warehouse saves \$635 weekly
- Canned goods warehouse cut loading costs 75%
- An auto parts maker saves 760 man-hours weekly
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TOWMOTOR
THE ONE-MAN GANG



UNSCREWS PLASTICS FROM THREADED MOLDS

AN APPLICATION OF KELLER AIR TOOLS

Here is an ingenious arrangement for removing threaded plastic parts from their molds. It uses power derived from a Keller Air Tool.

The Haas Corporation of Mendon, Mich. molds thousands of intricate plastic parts, many of which are threaded—telephone handsets,

flashlight cases, and similar items. To keep threads clean and sharp, these parts must be unscrewed very carefully from the molds.

Until a year and a half ago, this work was done by hand—a slow, tedious, awkward job. But by arranging a Keller Right Angle NutSetter as illus-

trated above, the worker now presses a foot control which applies firm, gentle power to unscrew the molded parts.

Labor saving is about 60% ... and the job is easier, quicker, and no longer one which workmen try to avoid.

Keller Air Tools have been put to thousands of ingenious uses to accelerate production and reduce the costs of manufacturing processes.



Air Tools engineered to industry

KELLER TOOL COMPANY, GRAND HAVEN, MICH.

AIR MOTORS • AIR HOISTS • AIR HAMMERS • COMPRESSION RIVETERS • GRINDERS • DRILLS • SCREW DRIVERS • NUT SETTERS

TEMCO

is rolling!



Elevated Track for B-47 Sections Typical of TEMCO Production Ingenuity

A major reason for TEMCO's rapid rise to its position as one of the largest airframe sub-contractors in the country is the production ingenuity constantly displayed throughout its operations. Typical of this manufacturing ambidexterity are the innovations effected by TEMCO on its B-47 rear fuselage installation line. Separate fixtures for the individual sections have been eliminated, and sections now travel from position to position on an elevated track supported by wheels bolted directly to the shipping rings at either end of the section. To further speed this work, suspended work platforms which travel with the units and provide proper work levels at all times have been installed.

Experience has proved the advantage of these innovations in better parts flow and added production efficiency. It's another characteristic of the TEMCO way . . . the way to greater production with greater efficiency at less cost. As well as the B-47 job for BOEING, TEMCO also is "rolling" on major sub-contracts for MARTIN on the P5M-1 Marlin . . . for DOUGLAS on the A2D Skyshark . . . and for LOCKHEED on the P2V Neptune.



In BUSINESS this WEEK ...

• Candidates ...

. . . can't count the delegates lined up for them now—and be sure they'll stay lined up until July. Here's how the nominating machinery works. P. 24

• Labor Attaches ...

. . . are something new in the U.S. embassies abroad. But these men who talk the language of labor do a big job for the State Dept. P. 44

• Detroit Designers ...

. . . can build auto engines that make the "hot-rod" enthusiasts gasp. The hitch: Superengines cost too much money to build today. P. 62

• Production Man ...

. . . Clay Bedford has the job of straightening out kinks in our military production. Here's the story on how he works and thinks. P. 84

• Presidents ...

. . . of five big companies dissect their jobs for the benefit of other management men. They agree on what the jobs are, what the problems are, but not on how to get the jobs done. P. 112

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A water input well is drilled in Burbank Oil Field, Osage County, Oklahoma, to flood unrecovered oil to the surface through old wells.

New Life For Old Oil Fields

In 1923, Burbank, Oklahoma, was a major oil field, producing 122,000 barrels a day. By 1950, this output had dwindled to a trickle.

Yet, petroleum engineers estimated that 75 per cent of the original oil was still underground. It could not be recovered by ordinary methods. So—an agreement was reached among the various lessees, including the Osage Indians, whereby Phillips Petroleum Company began what will

soon be the world's largest water flooding project.

Each day enough water to serve a city of 75,000 people will be pumped into the ground to force oil out. Beginning with 90 acres in 1950, the project will cover 20,000 acres and will take 30 years to produce about 140,000,000 barrels of oil for the partners in this project.

Efficient administration of petroleum resources is a particular interest of Phillips.



PHILLIPS PETROLEUM COMPANY
Bartlesville, Oklahoma

We put the Power of Petroleum at America's Service

There Ought
to be a
LAW...

and there IS!

Over the years eye injury costs at your plant will follow the **LAW OF AVERAGES** unless an adequate eye protection program is installed.

Eye injuries cost industry more than \$5 per employed worker per year with compensation averaging nearly \$400* per injured man. (If your company's eye accident costs have been less, without a formal eye protection program, you have been fortunate —so far.) Eye accidents also cost \$5 in lost productive time every second the clock ticks—time you, your customers and the nation can ill afford.

Put a comfortable AO Safety Goggle on every exposed worker and you can prevent 98% of these accidents at very little cost. Act today—it may be later than you think. Ask the AO Safety Products Representative in your area to call with facts and figures.

*Estimate

American Optical
COMPANY
SAFETY PRODUCTS DIVISION

SOUTHBRIIDGE, MASSACHUSETTS
BRANCHES IN PRINCIPAL CITIES



BUSINESS OUTLOOK

BUSINESS WEEK
JANUARY 26, 1952



President Truman's new budget is inflationary. And the thinking behind the figures—and figures to come—is even more so.

This feeling was clearly reflected in market circles this week. Producers and handlers of raw materials, particularly metals, were thinking in terms of higher prices. Common stocks, too, showed the effects.

Economy talk will prove largely that—talk. But don't figure the inflationary impact in terms of \$15-billion federal deficits.

The Treasury's cash income and outgo won't be so far out of balance as the budget. Special funds, such as Social Security receipts, aren't included in the budget. But the money goes to meet running expenses.

And, if the incomes of corporations and individuals keep on climbing, the tax take will exceed the estimates (as usual).

Thus, on a cash basis, income and outgo for fiscal '52 will about balance; a deficit of no more than \$8-billion is likely in '53 (page 22).

Inflation threats involve much more than the federal deficit, for the fiscal year ending June 30, 1953.

That's implicit in the arms "stretchout" (page 15). No tapering in armament outlays is in sight for late 1953; the plans now call for military budgets above \$60-billion into 1954 and beyond.

The longer this goes on, the more cumulative inflation will be.

Canada's dollar's regaining parity with our own this week was said in Wall Street to reflect more than the Dominion's improved balance of payments (page 102). A lot of money has been fleeing across the border.

Some of this flow is wild speculation—mainly in mining. But much probably is "smart money"—hedging against U. S. inflation.

Steel expansion will be working against inflation by next year.

Capacity now is above 108½-million tons annually. That's up from 104½-million at the start of 1951. And, in another year, the steel industry should be capable of turning out 117½-million.

Maybe defense and defense-supporting lines will soak up the 9-million-ton expansion expected this year. But that won't go on forever.

Some day there will be more steel for civilian goods. That will slow the chase of excess dollars after scarce goods.

Steel needs today are an elusive thing. Many companies with arms contracts say inventory is piling up far in excess of current production needs. The military, they insist, won't let them cut the intake.

Steel mills this week are operating at a lower rate—but output isn't suffering. It's still over 2-million tons a week.

That's the annual "bug" in the figures. The American Iron & Steel Institute usually revises the capacity estimate only once a year. When the plant is added, operations dip as a percent of capacity.

Thus 99½% this week is about what 103% was a while back.

Homebuilders have their go-ahead: No direct controls are planned.

The limitation on building is based on the shortest material—copper.

BUSINESS OUTLOOK (Continued)

BUSINESS WEEK
JANUARY 26, 1952

Allotments of the red metal are enough to start over 600,000 homes, based on the amount used in the average dwelling unit in times past.

Housing Administrator Raymond Foley sees no reason why the copper supply can't be stretched to cover 800,000 homes.

But Washington's debate between 600,000, 800,000, and 850,000 is academic to builders; barring some sort of direct controls, they will stretch the materials they can lay their hands on to the limit.

Employment in construction continues very high, even though home-building has fallen off from the record level of 1950. The plant-building boom—both private and public—is taking up the slack.

Despite adverse weather, December employment in construction totaled almost 2½-million. That's the highest ever for the month.

The industry is making jobs for 100,000 more than a year ago.

Industry's gradual switch from civilian production to defense goes on with no change in factory employment worthy of note.

As some lines are cut back, other plants hire an equivalent number of workers (although not the same workers, as Detroit can testify). Thus total manufacturing employment remains just under 16-million.

Factory jobs in December topped a year earlier by only 85,000.

Workersⁱ are available, when needed, to fill a lot of factory jobs.

Total nonfarm employment in December hit a new record of nearly 47½-million. That's about 900,000 higher than at the end of 1950.

Of course, there are a lot of "occasional" workers in that figure. About half-a-million people took store jobs in the Christmas rush, and another 350,000 worked as emergency postmen.

Yet the fact that these workers could be drawn into the labor force in December shows that they are available.

Pressure for higher unemployment compensation is bound to increase.

So far, it has come mainly from auto workers "disemployed" by cutbacks. Bills went into the hoppers of both houses of Congress this week for a 50% federal contribution on top of state payments.

These bills aim at higher rates on an emergency basis. Governors of states would specify the "critical defense unemployment areas."

Beyond this, though, a "cost-of-living" revision is a possibility. Such an updating of the old scales can be made attractive—a crutch for the economy if a "reconversion" slump threatens wide unemployment.

Feeding the world's hungry has become a major job for America's farmers in the postwar years.

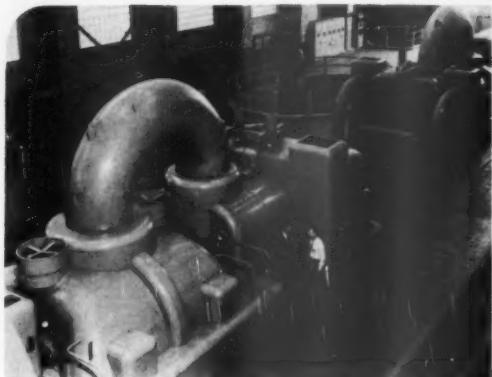
One of every three bushels of wheat raised in this country has been going abroad over the last six years, on the average.

Rice exports, lagging a year ago, now are soaring. For the four months through November, they totaled nearly 6-million 100-lb. bags. Very nearly half of this went to Asia—presumably Japan and Korea, mainly.

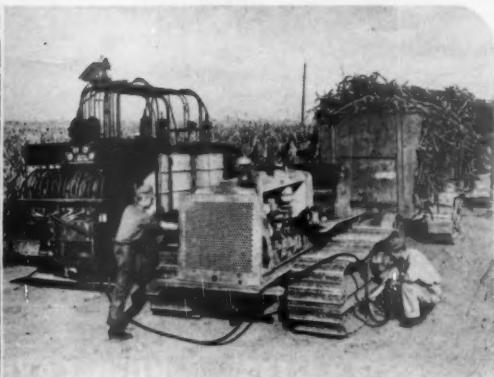
Food for hungry mouths continues the first line against communism.

Help for motorists: Larger imports of lead may ward off another cut in tetraethyl for gasoline, help maintain octane ratings.

Plants or Plantations



One of the many big utility power plants that rely on Gulf Periodic Consultation Service for close control of turbine operating costs in this Mitchell Station of West Penn Power Company.



Gulf Periodic Consultation Service helps keep the scores of tractors on this big sugar cane plantation of the U. S. Sugar Corporation running smoothly.

... *industry cuts costs through* **GULF PERIODIC CONSULTATION SERVICE**

From this one source you can get practical assistance on any problem that involves a petroleum product!

Gulf Periodic Consultation Service makes available to you the cooperative counsel of experienced sales and staff engineers on the selection and application of lubricants, fuels, rust preventives, solvents, waxes, cutting, and special process oils.

Their recommendations and suggestions nearly always result in lower-cost operation—and that's exactly what they have constantly in mind!

Gulf Periodic Consultation Service is available to mines, quarries, plants, railroads, contractors, fleet, and marine operators from Maine to New Mexico. Send the coupon for copy of a booklet

which gives more information on how this advanced cooperative plan can help you cut costs and improve production.



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719 Gulf Building, Pittsburgh 30, Pa.

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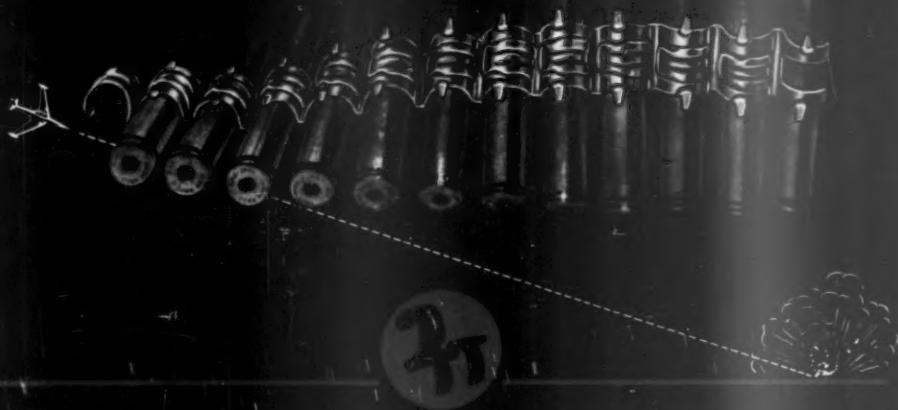
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Company _____

Title _____

Address _____

Shell Came with a New Twist...



SHARON® HIGH CARBON STRIP STEEL GOES INTO 20 MM. SHELL LINK

The link represents one of those tough little problems of engineering. The part is needed in millions. The tolerances in manufacture are so exacting as to make it a precision production job.

Sharon High Carbon Strip, fed

from coils, is being used regularly on this job. For this application a heat treatable spring steel with exceptionally good forming qualities is used. The use of strip aids high speed production. Big Sharon coils reduce down time too.

*Specialists in STAINLESS, ALLOY, COLD ROLLED and COATED Strip Steels.

SHARON STEEL CORPORATION

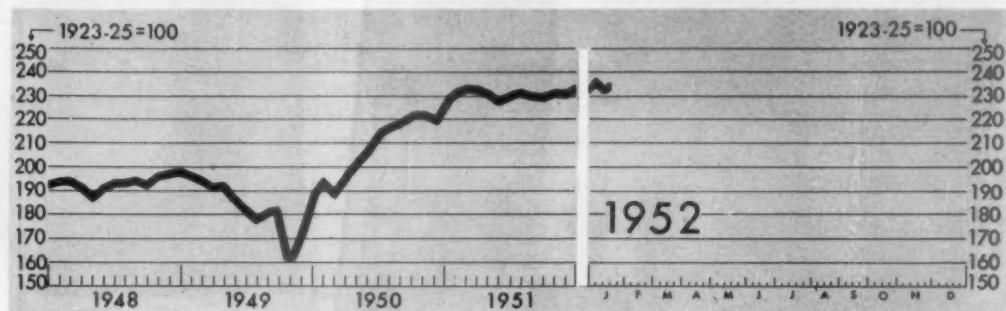
Sharon, Pennsylvania

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For information on Titanium Developments contact Mallory-Sharon Titanium Corp., Indianapolis 6

SHARONSTEEL

FIGURES OF THE WEEK



Business Week Index (above)

PRODUCTION

	Latest Week	Preceding Week	Month Ago	Year Ago	1946 Average
Steel ingot production (thousands of tons)	2,065	2,051	2,027	2,017	1,281
Production of automobiles and trucks	99,697	192,741	107,186	162,485	62,880
Engineering const. awards (Eng. News-Rec. 4-week daily av. in thousands)	\$43,406	\$40,860	\$37,485	\$55,082	\$17,083
Electric power output (millions kilowatt-hours)	7,540	7,666	7,824	6,909	4,238
Crude oil and condensate production (daily av., thousands of bbls.)	6,197	6,178	6,206	6,051	4,751
Bituminous coal production (daily average, thousands of tons)	1,960	1,839	1,912	1,970	1,745

TRADE

Carloadings: manufactures, misc., and l.c.l. (daily av., thousands of cars)	72	73	74	77	82
Carloadings: all other (daily av., thousands of cars)	52	52	51	53	53
Department store sales (change from same week of preceding year)	-13%	-21%	-4%	+31%	+30%
Business failures (Dun and Bradstreet, number)	158	164	117	167	217

PRICES

Spot commodities, daily index (Moody's Dec. 31, 1931 = 100)	455.2	458.2	461.1	528.0	311.9
Industrial raw materials, daily index (U.S. BLS, Aug., 1939 = 100)	311.2	314.5	318.1	381.2	198.8
Domestic farm products, daily index (U.S. BLS, Aug., 1939 = 100)	352.7	355.7	357.3	402.7	274.7
Finished steel composite (Iron Age, lb.)	4,131¢	4,131¢	4,131¢	4,131¢	2,686¢
Scrap steel composite (Iron Age, ton)	\$42.00	\$42.00	\$42.00	\$46.08	\$20.27
Copper (electrolytic, Connecticut Valley, lb.)	24.500¢	24.500¢	24.500¢	24.500¢	14.045¢
Wheat (No. 2, hard and dark hard winter, Kansas City, bu.)	\$2.51	\$2.52	\$2.54	\$2.38	\$1.97
Cotton, daily price (middling, ten designated markets, lb.)	41.66¢	42.13¢	41.94¢	44.66¢	30.56¢
Wool tops (Boston, lb.)	\$2.25	\$2.25	\$2.25	\$4.10	\$1.51

FINANCE

90 stocks, price index (Standard & Poor's)	193.8	190.9	186.8	169.1	135.7
Medium grade corporate bond yield (Baa issues, Moody's)	3.59%	3.60%	3.63%	3.17%	3.05%
Prime commercial paper, 4-to-6 months, N. Y. City (prevailing rate)	21%	21%	21%	18-2%	4-1%

BANKING (Millions of dollars)

Demand deposits adjusted, reporting member banks	54,544	53,706	54,822	51,702	††45,210
Total loans and investments, reporting member banks	74,217	73,729	74,842	70,449	††71,147
Commercial and agricultural loans, reporting member banks	21,441	21,267	21,442	17,972	††9,221
U. S. gov't and guaranteed obligations held, reporting member banks	32,283	32,074	32,577	32,634	††49,200
Total federal reserve credit outstanding	24,372	24,554	25,745	21,923	23,883

MONTHLY FIGURES OF THE WEEK

Cost of living (U. S. BLS, 1935-39 = 100) old basis	December	Latest Month	Preceding Month	Year Ago	1946 Average
Average weekly earnings in manufacturing	December	190.0	189.3	178.4	139.3
Wholesale prices (U. S. BLS, 1926 = 100)	December	\$67.36	\$65.81	\$63.88	\$43.82
Retail sales (seasonally adjusted, in millions)	December	177.8	178.3	175.3	121.1

*Preliminary, week ended Jan. 19.

††Estimate (BW—Jul. 12'47, p16).

‡ Date for "Latest Week" on each series on request.

† Revised.



Alfred Earle rebuilt a home for his bride
—and did most of the work himself.



His hobby: making toys.



A new skill: typewriting.

HE BUILT A WHOLE LIFE —WITH HALF A HAND

An accident at work required the amputation of Alfred Earle's right arm above the wrist. That was misfortune enough, but his left hand had already been practically paralyzed by an enemy bullet during World War II. It looked like total disability.

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At the Liberty Mutual Rehabilitation Center in Boston a specially designed artificial arm was fitted. Then Alfred received the individualized training for which the Center is noted. Now he can use tools, operate a typewriter and earn his living by day while he studies a business course evenings.

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Liberty Mutual's Rehabilitation Service is just one phase of HUMANICS, a comprehensive program for combatting loss in industry. HUMANICS works to prevent accidents by "guarding men" as well as machines. It reduces the human and financial cost when a man is injured,

by providing the best medical care and by rehabilitating the badly injured.

Result: Higher Production

Because it provides much more than protection, HUMANICS offers employers a new standard of value for Workmen's Compensation Insurance. It helps to increase the effectiveness of working men and women. It "pays off" — in better productivity.

You can check your own program

"HUMANICS: A new concept of loss control in industry" is a book describing five ways to reduce the cost of Workmen's Compensation Insurance, increase productivity and improve employee relations. A request will bring a copy without charge. Address Liberty Mutual Insurance Company, 175 Berkeley St., Boston 17, or the nearest branch office.

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WASHINGTON OUTLOOK

WASHINGTON
BUREAU
JAN. 26, 1952

A

BUSINESS
WEEK
SERVICE

Fact No. 1 about the budget is the stretching out of the defense timetable. This was foreseen (BW—Oct. 6 '51, p15). Now it's policy, set by Truman. His budget throttles defense down to a slower pace than was planned heretofore. And the extra for planes and A-weapons is tailed on—not superimposed. This may avoid a big new pinch on the economy, but it also will delay any return to normal.

Congress will vote the spending schedule substantially as is (page 22). It will trim here and there, of course, but it won't force major changes on Truman. So you can anticipate the consequences with considerable certainty.

The spending turndown will be delayed. Instead of next midyear, it won't come before mid-1954, or perhaps even later. Thus the government fiscal prop under business will remain strong for several years, at least.

The end of controls will be delayed, too. They'll stay with you as long as defense creates shortages and threatens more inflation.

Tax relief will be pushed into the dim future. The cold fact is that present rates may be no more than enough to balance the budget after the buildup is past and defense is on a maintenance basis.

Many contracts will be refigured to reflect the stretchout policy. Take aircraft, for example: Rescheduling to slow down production rates started this week. Some contracts are being canceled, though over-all it amounts to little more than putting production on a longer timetable. More planes will be turned out than was planned six months ago. (The Air Force is being upped from 95 wings to 143.) But they will be turned out more slowly, over a longer period of time. This is the sort of thing that will limit the defense pinch on the civilian side of the economy.

It's a calculated risk. The official position is that war dangers have lessened in the face of the buildup and that we have more time.

There's disagreement over such a policy. Truman settled on his course to prevent what he feared would become an unbearable economic burden. But there are dissenters in both the Pentagon and the State Dept. who feel that the danger in the East is greater than ever. The truce talks drag on and on. Meanwhile, Red China threatens new aggression around her borders. And there's recurring talk that if new Koreas break out the West will have to challenge China—and maybe even Moscow—or be bled white fighting local wars.

New trades for foreign metals are in the making following the steel-for-tin-and-aluminum swap just completed with Great Britain. Negotiations are under way to get more cobalt, columbium, and others of the rare metals by trading U. S. products—making barter deals.

More aid for small business will be forced soon by Telford Taylor, boss of the Small Defense Plants Administration.

A floor under allotments for nonessentials will be fixed by the National Production Authority. The aim is to assure producers of such things as jewelry, toys, blinds, etc., that their metal won't be cut below a certain

WASHINGTON OUTLOOK

(Continued)

WASHINGTON
BUREAU
JAN. 26, 1952

level. That way the makers are supposed to be able to plan with certainty. As things now stand, they don't know whether to accept orders.

"Contract pools" for the smalls is another of Taylor's projects. He's pushing the Pentagon to list components that small manufacturers can make with existing tools and labor. Later his SDPA may take prime contracts and then subcontract them out. It has the power to do so.

The tax boost Truman wants is no mere plugging up of "loopholes." It's the \$4-billion plus he didn't get last year—a general rise.

On corporations, it means a regular rate of 55%, up from 52%. That would take a \$1-billion bite out of profits.

On individuals, it means an average rise of 6% on top of the recent 11% hike. It would soak up \$1.3-billion.

On excises, it means a rate rise equal to that voted last year, adding \$1.8-billion to the cost of taxed goods and services.

On so-called loopholes—exempt bonds, depletion allowances, etc.—it means some \$300-million more in taxes.

On capital gains, the maximum rate would be boosted to 37½% from the current level of 26%. That's sharp—nearly a 50% hike in the rate.

Congress won't buy much of that. In fact, it may even shelve taxes without the formality of holding hearings. Republicans oppose any rise. And many of Truman's Democratic backers are saying: "Let's wait a while and see what the spending-receipts-deficit picture is around midyear." The feeling is that the budget overstates spending and understates receipts, that the deficit won't be so high as Truman has forecast. So odds are against a tax rise.

Wage control: Nathan Feinsinger will stay as boss. The University of Wisconsin is extending his leave beyond Jan. 31 at Truman's request.

Price control: DiSalle's departure may bring a gradual easing up. The price chief has felt that a tough stand was good consumer politics. From the start he has planned to return to Ohio and seek office.

Democratic maneuvering for the farm vote is off to a fast start. The strategy is the same Truman used so well in 1948—scare farmers by telling them that the Republicans will let prices go down.

Note Brannan on Commodity Credit Corp. loans. Irregularities have come to light in the handling of government grains. But Brannan tries to dismiss them as of no consequence. He sees the big to-do over them as a dark plot by the Republicans to discredit the program and then wreck it.

Scandal: The Democrats are split over what's the best thing for them. That's why there's been no rush to back Truman's promise to clean up. One faction wants to lift the lid, arguing that the voters then will forgive. The other, including some key Truman men, says no. This group is aware that stalling will be called whitewash. But politically, it would rather try to label such charges Republican politics than take the risks of what might come to light.

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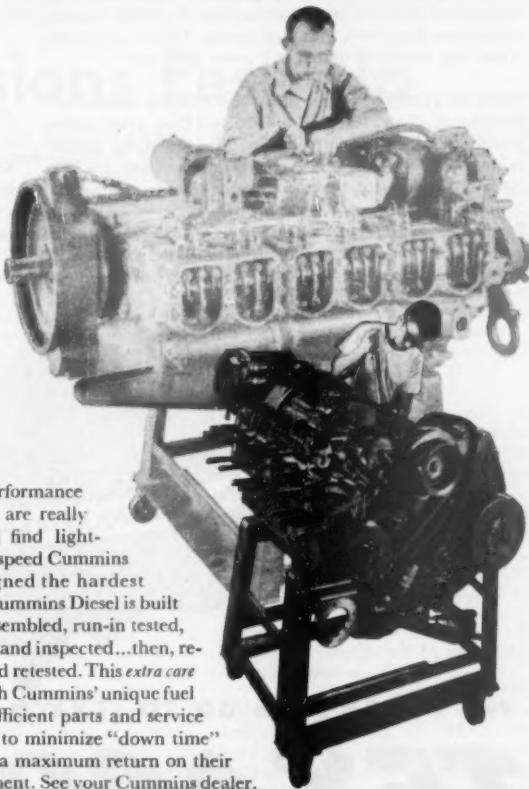
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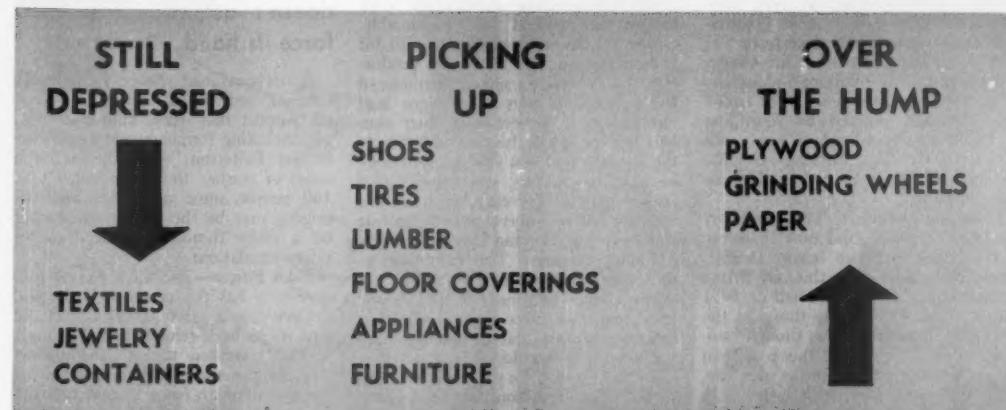
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Pocket Depressions Ease Up

The base of the U.S. business boom is broadening out. Some of the soft spots that puzzled and worried businessmen in 1951 are beginning to harden up.

This means that for a number of important lines 1952 promises to be a far better year than 1951. The boom this year will not only be bigger. It will be more nearly unanimous.

• **Left Out**—For business generally, there was nothing wrong with 1951. But a sizable number of unrelated industries found themselves stuck with private depressions. Even though national income was shooting up, their business either fell off or failed to rise as they had hoped.

This week **BUSINESS WEEK** reporters all over the country made a check of the industries that have been suffering from pocket depressions. They found:

- Most of the depressed lines think they can see a definite pickup under way.
- Some think they are already back on the bandwagon.
- Only a few still see no signs of improvement; and some of them are hopeful.

I. On the Floor

Here's what you find in the industries still depressed:

Textiles. It's been almost a year now since the post-Korea boom faded for textiles. The recession that followed hasn't been quite so bad as the one in

1948-49, but it has been bad enough. For example: Employment in Rhode Island woolen and worsted mills dropped from 27,169 in February, 1951, to 21,718 last December.

At present, workers are getting an average of 34.4 hours a week—lower than any previous figure, even back in the 1948-49 slump.

On top of this, inventories are still too high for comfort at the mill level. So even though the industry thinks a better civilian goods trade may be shaping up for spring, nobody looks for a runaway market. Beyond some firming of prices, the trade has nothing more tangible on which to base its optimism than a belief that it all has to end some time.

Jewelry, also centered in Rhode Island, is in a similar slump—possibly even worse. Jobs in December totaled 17,112, a new low in the steady decline the industry has experienced since last February's peak employment of 23,000.

So what you get from a look at the combined textile and jewelry slump in Rhode Island is a total job loss of over 17,000 people since last February. That's roughly 12% of the number still employed in manufacturing in the state.

Containers. This is one industry that must be classified as still down—even though in any other year and by any other yardstick it would appear to be riding at a pretty high level. Production and sales have been down a little more than 10% from the peak levels of the first six months of last year. The in-

dustry expects, too, that business will run between 10% and 15% lower for this year than for 1951.

The industry claims that the reason for this lies in the fact that it was caught with big inventories, beginning last June. A lot of distributors and many independent box manufacturers still have big inventories. Therefore, there's nothing to pin too much hope on for a general pickup in business.

II. Riding High

At the other end of the scale, you find a handful of industries that feel they have enough facts to prove they are well over the hump. Here's their reasoning:

Men's clothing. The swing here may be the first sign of a change in the fortunes of the textile industry as a whole. A top sales executive, just back in Rochester from a swing around the country, says that inventories are already practically back to normal. He expects the second half of this year to be better than all of 1951.

The catch is that 1951 was terrible. Manufacturing was off an average of 19% for 11 months, off 30% for the last six months. Nevertheless, the facts as of this moment fully back the optimism. Bond's, in Rochester, called back 3,200 employees about Jan. 7 and went into practically full production. Two other plants, where business had been slack, went into high gear. But the industry still has its fingers crossed,

won't rest easy until it sees what happens with fall orders.

Plywood. Just at the end of the year plywood turned an abrupt about-face. In the first nine months of 1951 weekly production of fir plywood had averaged 55-million sq. ft.—but sales averaged only 46-million sq. ft. Quarter-inch panels dropped in price from \$97 to \$75. Then the market firmed up, and the price rose to about \$83—where it is now. As a result, in the week ended Jan. 12, sales jumped to 74-million sq. ft., a new record. And most mills have a 30- to 60-day backlog. Defense housing and Army buying should keep things rolling.

Grinding wheels. This industry seems to be more solid now than any of those that had been having trouble. (Some companies deny this, say things are still bad.) In the last half of 1951 sales dropped 12% below those for the first half. Now it looks as though business will be 10% better this year than last. Already production is way up, with deliveries lagging a little. In diamond wheels, the situation is described as "fantastic": Makers can't promise deliveries within anywhere from six months to two years. One thing that has given grinding wheels a boost is the steady growth of the defense program. Production of weapons calls for a lot of grinding—and grinding to finer tolerances than ordinary work.

Paper. In general, the paper industry has experienced a slump only in the most relative sense—production is running at 99.9% of capacity instead of at 105%, as it was a year ago. Both kraft paper and newsprint are stronger than ever (page 128), with the latter worth its weight in gold. Paperboard, however, has been down and is just now getting back on an even keel. The industry as a whole thinks it has nothing to worry about, figures this year to be better than either of the last two years.

III. A New Dawn?

Other industries in a depressed state wish that they were as well off as these. Some of them, after a rough year, think they are—but they can't be sure. In a quick rundown, here's what you find:

Shoes. Business was brutal all last year. Now, just within the last few weeks, there has been a small but definite pickup in demand; one house says that rather steady orders are coming in from all over the U.S. But there is still a good-sized inventory and a not-too-active production schedule. However, the general hope—and belief—is that things are getting back to normal.

Tires. Demand is off mildly, but it always is in January. Production is running at a fairly good rate. The reason is that inventories are only about half

of normal. Right now the industry agrees that the tire trade is just about back to normal. Lower-priced, second-line tires, about to make their appearance as the result of a government O.K., should speed up sales considerably.

Lumber. Just within the past week lumber has perked up considerably. Orders for the week ending Jan. 19 hit 123-million bd. ft., 10% over production and the juiciest since the middle of last year. This plus other signs lead lumbermen to believe that their markets will be good this year—not up to the boom period of a year ago, but good enough to sustain operations at a fairly high level. Nevertheless, the whole industry has its fingers crossed, figuring this early high buying may be a fluke.

Floor coverings. The carpeting industry expects sales to be up this year—which may not mean a real boom. Last year's business at the wholesale level was so bad that the pickup starting now looks wonderful by contrast.

In fact, during the past two years this industry has been on a roller coaster. From July in 1950 until April of last year, sales were fantastic at both the wholesale and retail levels. For every yard of carpeting sold, retailers bought an extra yard for their shelves—expecting Korea to cut off supplies. When they got stocked up, they quit buying even replacements for what they sold. Now they are back to normal inventory, buying a yard for every yard they sell. As a result, the industry expects 1952 to be an average of the unbelievable boom year of 1950 and the terrible slump year of 1951.

Appliances. This industry, always up and down at best, seems to be up at the moment—at least in a sense. You have a hard time pinning down the reasons these days for any trouble it may be having. Most companies blame any slump on materials shortages. General Electric, for example, admits that production was off 40% in the last quarter of last year, but immediately adds that it would have been 60% if the company hadn't found substitute materials for things like aluminum. In any case, production right now is running between 20% and 40% below what it was a year ago. The industry sees hope only in the fact that its output is moving—demand is exceeding supply.

Furniture. Manufacturers see a highly competitive year, which they think will squeeze margins. But for those who have the right lines and right prices, it should also be a good year. Furniture volume for 1951 exceeded 1950 in dollar volume by about 1.5%—but physical units shipped ran about 9% below 1950. And in the last six months of last year shipments were way below the previous year. Signs are that this year business will be a lot better than that.

Air Crashes . . .

... bring pressure for tighter safety rules. If CAA doesn't act, Congress may force its hand.

A twin-engined American Airlines Convair crashed as it approached Newark Airport this week, killing 28 people, including former Secretary of War Robert Patterson. As a climax to a series of crashes that have killed over 100 people since mid-December, the tragedy may be the thing that touches off a really thorough overhaul of air safety regulations.

• **CAA Powers**—The Civil Aeronautics Authority has the power to make and enforce drastic safety rules. But in the past it has been reluctant to get tough. It hasn't wanted to load the airlines with the expense of elaborate additional equipment or to restrict operations unnecessarily.

The recent tragedies may force the CAA's hand. If it doesn't do something, Congress is likely to act on its own.

Sen. Edwin C. Johnson of Colorado has announced that his Senate Commerce Committee will study all angles of the latest crash. He indicated that many questions had arisen concerning the adequacy and location of the Newark field where the doomed airplane was trying to make an instrument landing.

Other members of Congress also want to investigate air crashes in general, and the Newark disaster in particular.

• **Two Ways**—Action by the CAA could move in either of the two following directions:

• It could tighten the rules for landing. Some such action is virtually certain for the Newark Airport and may well be taken at other fields. Allowable minimum ceilings may be raised for bad-weather operations. This would force more flight cancellations.

• It could require the airlines to spend more money on the cockpits of their planes. Pilots say that what is now called man failure could be greatly reduced by better engineering of the instruments, addition of many small and relatively inexpensive improvements. On a larger fiscal scale, heavy and costly equipment like gyroscopic automatic pilots, the Sperry "Zero Reader," and radio altimeters could be required.

All the airlines plan to install such equipment eventually, but time and money hold them back. Under present pressure, though, the CAA might order installation at once.



SPEARHEADS of the reviving attack on Federal Reserve Board policies are Economic Adviser John D. Clark (left) and Rep.



Wright D. Patman, whose economics subcommittee is about to start a new probe of the Fed. Their attitudes show that a . . .

New Fight for Cheap Money Is Coming

Another fight is shaping up over the Federal Reserve Board's credit control policies. But it won't be a fight between the board and the Treasury like the one that preceded their peace treaty last spring (BW-Mar.10'51,p132). Hence, it won't make any difference in the availability of credit or the rates business has to pay for it.

The shooting this time is coming from two other directions:

- John D. Clark, vice-chairman of the President's Council of Economic Advisers, went out of his way in the council's economic report to put in a plug for cheap money. At the same time he sharply criticized the Federal Reserve Board's mildly restrictive credit policies—on the grounds that they add to Treasury costs in interest payments and do nothing to restrain inflation.

- Rep. Wright Patman, chairman of a joint economic subcommittee in Congress, has started setting the stage for an investigation of the board's policies (BW-Dec.1'51,p22). Patman is a cheap-money man.

- **Agreement**—All this promises to reopen the whole question of whether money and credit controls can and should be used to head off inflation. It could touch off another fight between the Federal and the Treasury except for one thing: Neither the Treasury nor the Federal wants to fight.

The Federal is fairly well satisfied

with the level of interest rates that has been established since it stopped pegging the price of government bonds. It wouldn't want to tighten up any more—even if the Treasury would consent.

The Treasury, on its part, figures that the present set of rates is about the best it can hope for. And it is looking ahead to the second half of 1952, when it will have to do some tremendous financing jobs. It will need the full and willing help of the Federal then.

This explains why Secretary of the Treasury John Snyder isn't picking any fights. It also explains why President Truman is passing up an opportunity to pack the Reserve Board with pro-Treasury members.

- **Nominations**—The President nominated two new members of the Reserve Board this week. One fills the vacancy left by Marriner Eccles. The other replaces Edward L. Norton, who has just resigned.

Both of the new men are known in Washington as supporters of William McChesney Martin, the Federal Reserve Board chairman. James Louis Robertson, of Nebraska, has been deputy controller of the currency. Abbot L. Mills, Jr., of Oregon, is a lifelong banker.

Truman will probably have a chance to make two more appointments before long. But if he had any idea of

packing the board, this was the time to start.

- **Policy Sticks**—What all this means is that the Fed will stick by its present policies, at least for the next few months. In the second half of the year it may give the bond market a boost to help the Treasury with its financing problems. But it won't go back to a system of firm price supports for governments.

Meanwhile, the fireworks at the Patman hearings will make an interesting display, even if they don't shape policy.

- **Hearings**—Clark himself won't testify. He is too close to the President, and Truman wants to keep out of the debate. But there will be other economists to carry the ball. Briefly, their argument will be: Tighter money has embarrassed the Treasury without making any difference in the inflation picture. In reply, the Fed will argue that by pulling the pegs in the government market it stopped institutional investors—especially insurance companies—from dumping government bonds and put a check on the expansion of the money supply generally.

If Patman had a hand-picked committee, he might be able to bring in some strong recommendations. But at least two members, Sen. Flanders and Sen. Douglas, are strong supporters of the Fed. So even the final report of Patman's group probably will be split.

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... THE NEW BUDGET
CONTAINS PLANS TO
SPEND THIS MUCH . . .

... AND ASKS
THIS MUCH
"NEW OBLI-
GATIONAL
AUTHORITY"

	FISCAL '51 ACTUAL	FISCAL '52 EST.	FISCAL '53 EST.	FISCAL '53
(Millions of Dollars)				
Military Services	\$20,462	\$39,753	\$51,163	\$52,359
International Security and Foreign Relations	4,727	7,196	10,844	8,238
Finance, Commerce, Industry	176	751	833	1,171
Transportation, Communication	1,685	2,153	1,643	1,521
Natural Resources	2,051	3,082	3,237	2,694
Agriculture and Agricultural Resources	650	1,408	1,478	1,327
Labor	228	240	246	259
Housing and Community Development	602	881	678	1,421
Education and General Research	315	238	624	688
Social Security, Welfare, and Health	2,380	2,680	2,662	2,578
Veterans' Services and Benefits	5,339	5,166	4,197	4,181
General Government	1,209	1,353	1,484	1,443
Interest	5,714	5,955	6,255	6,255
Reserve for Contingencies	25	100	125
Adjustment to Daily Treasury Statement	705
TOTAL	\$44,633	\$70,881	\$85,444	\$84,260

Budget Charts U.S. Course for Years

President Truman's budget for fiscal 1953 is notable for two things:

- It calls for federal spending greater than ever before in peacetime—\$85.4-billion.

- It sets hard figures for the new level of mobilization—the high plateau that the U.S. will reach and maintain for the next three or four years. Earlier plans called for defense spending to reach a sharp peak, then descend swiftly. The new schedules spread the same total program over a longer period.

Government spending at this level

puts a big, solid, and high-level floor under U.S. business. Whether the money comes from borrowing or taxation, there'll be \$85.4-billion pouring into the economy. This U.S. budget is also the biggest single economic fact in the country and in the world today. For the arming of the West falls flat without solid U.S. support.

- Reaction Mild—Despite its size—only \$14-billion below the World War II peak—the new budget isn't touching off the hullabaloo you might expect. That's because we've been building up to it

for the past 18 months—ever since the entry of South Korea.

The big increase in spending will be via the Pentagon, although mobilization and the arms buildup run all through the budget. Actual military spending will run to \$51.2-billion, up \$11.4-billion from this year. Foreign aid and defense-supporting programs come to \$13.9-billion, bringing the outlay for "national security programs" to \$65.1-billion.

- Glimpse Ahead—More important than all this, the budget shows you

what to expect in the budgets for fiscal 1954 and 1955. Truman and his top advisers some time ago decided to "plateau" rather than "peak" the arms buildup. So the figures in the 1953 budget fix the height of the plateau we'll stay on for two or three more years.

The plans still call for all-out production of critical items for the next 12 months—jet engines, tanks, electronics. But it also calls for leveling off the rate of total arms output by January of next year (page 17). Then this rate holds through calendar 1953 and 1954—about \$5-billion per month total spending, with about \$3.3-billion for hard goods.

The original post-Korea plans would have had total military spending expanding into calendar 1953—reaching a peak of close to \$7-billion per month. That peak would have been followed by a drop perhaps to as low as \$3-billion or \$3.5-billion per month beginning in 1954.

Too High—This roller-coaster plan has been discarded. Top military planners now say that much of the "peak" program "wasn't in the cards"—that it would have been physically impossible to get the deliveries called for by the plans.

While the military gets the really big slice of the budget, there are more than crumbs left for other programs. Purely nondefense outlays are figured at \$20.3-billion—down slightly from this year's \$21.2-billion.

Congressmen, Democrats and Republicans alike, began attacking Truman's budget immediately. There was a rash of talk about "economy all up and down the line, including the military." Actually, there seemed to be only one big item that might take substantial cuts—the \$10.5-billion foreign aid program. There'll be some trimming elsewhere. But on the basis of last year's performance Truman figures to get most of the \$85-billion.

Deficits—All this means that by June 30, 1953, the government will be even deeper into the red. Truman is taking the smart election-year course of easing off on his tax demands. On the record, he says he still wants a new tax bill to bring in the balance of the \$10-billion program he asked for last year—that is, about \$4.3-billion. But almost every shade of Congressional opinion is solidly against any kind of tax boost.

Truman predicts a deficit of \$8-billion for the current fiscal year—which ends June 30. There will be a deficit, but it won't be that big. Truman and Secretary of the Treasury Snyder are guessing low on tax yields, as they usually have in the past. They predict revenues of \$62-billion in the current fiscal year. More likely the final take will be around \$66-billion—which will

bring the deficit down to \$4-billion.

Inflationary Effects—From the standpoint of inflationary effect, even that overstates the impact of the deficit. The thing that counts in fostering inflation is the difference between what the government takes in from the public and what it pays out. Since it is running about \$4-billion ahead in its trust fund accounts—principally in the social security funds—it will be able to use the receipts from this source to offset the deficit in the regular budget. Hence, on a cash basis, the budget will be close to balance in fiscal 1952.

For fiscal 1953, Truman sees a deficit of about \$14-billion. But here again, his revenue estimate—about \$71-billion—is probably low. The actual budget deficit will probably be around \$10-billion, and the excess of cash payments over receipts about \$6-billion.

Considering the budget as a whole, you can hardly overestimate its importance. Even the bits and pieces loom large for particular industries and areas of the economy. Here are some of the high spots:

Defense production—Another \$900-million authority is requested to expand raw materials supply and production capacity. This would result in \$285-million more spending in fiscal 1953.

Stockpiling—Expenditures will rise to \$1.1-billion, compared to \$800-million this year.

Small business—\$28-million asked to enable Small Defense Plants Corp. to take prime contracts, subcontract them to small outfits.

Foreign aid—\$10.5-billion asked. But Congress will whittle this down. A new war scare could keep it up.

Price controls—\$150-million more is asked to expand the staff of Office of Price Administration.

Construction—Total dollars for construction will hit \$7.7-billion, up 13%.

Reconstruction Finance Corp.—New loans expected to reach \$260-million, compared to \$166-million this year.

Atomic energy—New \$5-billion to \$6-billion expansion over five years has been decided on, and a small start will be made out of fiscal 1953 funds.

Electric power—Four hydro projects are asked: the St. Lawrence Seaway; Hells Canyon, Idaho; Ice Harbor on the Snake River, Idaho and Montana; and Hartwell Reservoir, South Carolina. Also sought is \$63-million for 11 new steam and hydro plants for the Tennessee Valley Authority.

Unemployment—The budget forecasts smaller outlays in fiscal '53 than this year. No mention is made of special federal payments to state unemployment funds hit by "mobilization" unemployment.

Housing—Budget requests \$1-billion increase in mortgage insurance under various housing programs.

Budget English in One Lesson

You need more than a program—or a dictionary—to follow the Washington ball game. Trouble is the bureaucrats are constantly coming up with new terms—or giving new meaning to old ones. Two that have cropped up recently: major national security programs and hard goods.

Here's a quick guide to help you keep score on the budget:

Budget—The whole detailed package of what it costs in dollars to run government for a year. The President proposes, the Congress approves or disapproves.

Appropriations—Funds set aside by Congress to cover the costs of specific and current government programs.

Obligational authority or authorization—Authority from Congress giving an agency power to commit the government to an expenditure, including one that may not take place for several years. The Defense Dept.'s new obligational authority is being cut now—but the amount of money it spends will

actually rise next year on the basis of authority granted by Congress in the past.

Expenditures—Cash paid out by the Treasury during the fiscal year. It's the estimate of expenditures during the next fiscal year that gives you your best clue to the impact of government on business.

Major national security programs—Under this label, Truman lumps these: military; which covers all Defense Dept. activities, including stockpiling; foreign aid, both military and economic; atomic energy; defense production expansion and controls; civil defense; and merchant marine.

Major procurement, or hard goods—Arms and equipment, plus construction.

Civil functions of the military—The flood control, rivers, and harbor work, dam-building and similar programs supervised by the Army Corps of Engineers.

Mutual security program—The total of military and economic aid to allies or potential allies.

State	Number of Delegates	How Selected	When Chosen	
Alabama	14	Convention	Not set	First ballot more or less committed. The rest by caucus at Chicago.
Arizona	14	Convention	Not set	First ballot more or less committed. The rest by caucus at Chicago.
Arkansas	11	Convention	Not set	First ballot more or less committed. The rest by caucus at Chicago.
California	70	Elected	June 3	Support primary winner as long as he seems to have a chance to win.
Colorado	18	Convention	Not set	First ballot more or less committed. The rest by caucus at Chicago.
Connecticut	22	Convention	Not set	First ballot more or less committed. The rest by caucus at Chicago.
Delaware	12	Convention	Not set	First ballot more or less committed. The rest by caucus at Chicago.
Florida	18	Convention	Not set	First ballot more or less committed. The rest by caucus at Chicago.
Georgia	17	Convention	Not set	First ballot more or less committed. The rest by caucus at Chicago.
Idaho	14	Convention	Not set	First ballot more or less committed. The rest by caucus at Chicago.
Illinois	50	Elected	Apr. 8	Not bound by primary result, regarded as "advisory."
Illinois	10	Convention	Not set	First ballot more or less committed. The rest by caucus at Chicago.
Indiana	32	Convention	Not set	First ballot more or less committed. The rest by caucus at Chicago.
Iowa	26	Convention	Not set	First ballot more or less committed. The rest by caucus at Chicago.
Kansas	22	Convention	Not set	First ballot more or less committed. The rest by caucus at Chicago.
Kentucky	20	Convention	Not set	First ballot more or less committed. The rest by caucus at Chicago.
Louisiana	15	Convention	Not set	First ballot more or less committed. The rest by caucus at Chicago.
Maine	16	Convention	Not set	First ballot more or less committed. The rest by caucus at Chicago.
Maryland	24	Elected	May 5	Support primary winner as long as he seems to have a chance to win.
Massachusetts	38	Elected	Apr. 29	None.
Michigan	46	Convention	Not set	First ballot more or less committed. The rest by caucus at Chicago.
Minnesota	25	Elected	Mar. 18	Support primary winner as long as he gets 10% of total vote cast.
Minnesota	3	Convention	Not set	First ballot more or less committed. The rest by caucus at Chicago.
Mississippi	4	Convention	Not set	First ballot more or less committed. The rest by caucus at Chicago.
Missouri	26	Convention	Not set	First ballot more or less committed. The rest by caucus at Chicago.
Montana	8	Convention	Not set	First ballot more or less committed. The rest by caucus at Chicago.
Nebraska	18	Elected	Apr. 1	Support primary winner as long as he seems to have a chance to win.
Nevada	12	Convention	Not set	First ballot more or less committed. The rest by caucus at Chicago.

Convention Delegates: How Tight Are They Tied?

This week the various contenders for the Republican Presidential nomination—or their backers—were engaged in an elaborate counting game. They were claiming delegates—counting up the number of votes they hoped they had sewed up for the national GOP convention.

Some of their claims are solid. That is, the delegates actually will go to the

State	Number of Delegates	How Selected	When Chosen	
New Hampshire	14	Elected	Mar. 11	Support primary winner until he withdraws.
New Jersey	38	Elected	Apr. 15	None.
New Mexico	14	Convention	Not set	First ballot more or less committed. The rest by caucus at Chicago.
New York	86	Elected	Apr. 22	None.
New York	10	Convention	Not set	First ballot more or less committed. The rest by caucus at Chicago.
No. Carolina	26	Convention	Not set	First ballot more or less committed. The rest by caucus at Chicago.
No. Dakota	14	Convention	Not set	First ballot more or less committed. The rest by caucus at Chicago.
Ohio	56	Elected	May 6	Support primary winner as long as he seems to have a chance to win.
Oklahoma	16	Convention	Not set	First ballot more or less committed. The rest by caucus at Chicago.
Oregon	18	Elected	May 16	Support primary winner as long as he seems to have a chance to win.
Pennsylvania	70	Elected	Apr. 22	Nothing binding.
Rhode Island	8	Convention	Not set	First ballot more or less committed. The rest by caucus at Chicago.
So. Carolina	6	Convention	Not set	First ballot more or less committed. The rest by caucus at Chicago.
So. Dakota	14	Elected	June 3	None.
Tennessee	20	Convention	Not set	First ballot more or less committed. The rest by caucus at Chicago.
Texas	38	Convention	Not set	First ballot more or less committed. The rest by caucus at Chicago.
Utah	14	Convention	Not set	First ballot more or less committed. The rest by caucus at Chicago.
Vermont	12	Convention	Not set	First ballot more or less committed. The rest by caucus at Chicago.
Virginia	23	Convention	Not set	First ballot more or less committed. The rest by caucus at Chicago.
Washington	24	Convention	Not set	First ballot more or less committed. The rest by caucus at Chicago.
West Virginia	16	Elected	May 13	None.
Wisconsin	30	Elected	Apr. 1	Support primary winner as long as he gets 10% of total vote cast.
Wyoming	12	Convention	Not set	First ballot more or less committed. The rest by caucus at Chicago.
Alaska	3	Convention	Not set	First ballot more or less committed. The rest by caucus at Chicago.
District of Columbia	6	Convention	Not set	First ballot more or less committed. The rest by caucus at Chicago.
Hawaii	8	Convention	Not set	First ballot more or less committed. The rest by caucus at Chicago.
Puerto Rico	3	Convention	Not set	First ballot more or less committed. The rest by caucus at Chicago.
Virgin Islands	1	Convention	Not set	First ballot more or less committed. The rest by caucus at Chicago.

convention fully prepared to fight—and fight hard—for a particular candidate. But no delegation is so firmly pledged that it isn't open to bargaining. And most delegates are free to switch their votes in a hurry—no matter who claims them.

• **Plenty of Leeway**—The table above shows just how much elbowroom each delegation has. In the past it has proved

more than enough to produce some stunning upsets. Hopeful candidates have gone to bed one night sure they would win—and got up the next morning as forgotten men.

Delegates to the national convention are selected in one of two ways, depending on the state: (1) They may be elected by direct vote in the Presidential primaries, or (2) they may be chosen

by state conventions of the party. The state conventions are usually under tight control by the local party organizations.

Some states use both methods of selecting delegates. Illinois elects 50 district delegates by primary and names 10 delegates at large at the state convention. New York elects 86 district delegates in the primary and 10 dele-

gates at large at the state convention. In Minnesota, 18 district delegates plus seven delegates at large come out of the primary; three delegates at large are chosen at the state convention.

• **Instructions**—Where there is a state convention, it may give the delegates their voting instructions, at least for the first ballot. Votes on later ballots are decided by caucus at the national convention.

Delegates from the primary states generally have more freedom to switch their votes. Only two states, Wisconsin and Minnesota, pin their delegates down by law to support primary winners for fixed periods. Only four other primary states pledge delegates to any degree. And here the candidate has no assurance that his delegates will stick after the second or third ballot.

On the other hand, delegates from the convention states are more likely to switch in a body. They are under tighter control by state leaders and are apt to fall in line when a leader makes a deal to switch to a more promising candidate.

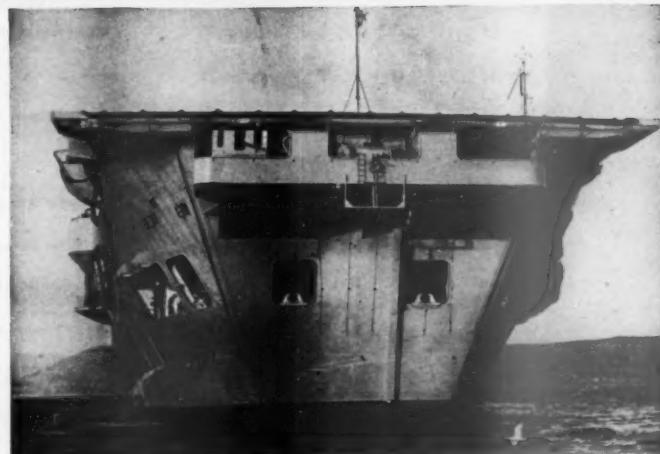
• **Bandwagon**—The practical politics of it is that delegates stay with their candidates as long as it appears they have a chance of piling up the 603 votes necessary to win. But there is nothing legally binding about this loyalty. The moment there is a stampede to a candidate, all commitments go overboard.

New Hormone Speeds Animal Reproduction

The Upjohn Co., big pharmaceutical house, this week announced its discovery of a new sex hormone that may double the annual U. S. lamb crop. The hormone's effect is to induce an artificial oestrus (heat) in ewes so that they can conceive and produce offspring twice a year instead of once. Also, it has proved highly successful in treating sterility in cattle, swine, and other domestic animals—it makes nonproductive animals productive.

Upjohn calls its new hormone ECP (it's known technically as estradiol cyclopentylpropionate), says it will go on the market Mar. 1. It said that the product has been thoroughly tested over the past two years at 35 agricultural colleges and state experiment stations, and by 36 veterinarians. Reports from all tests have been uniformly good, and use of the product has brought no serious side reactions.

Upjohn says that the compound can be used with equal effectiveness and safety on dairy cattle, pigs, horses, dogs, cats, mink, and chinchillas. The amount given depends on the animal. The cost for treating a cow is about \$1 per shot.



Newest, Fastest, Most Secret . . .



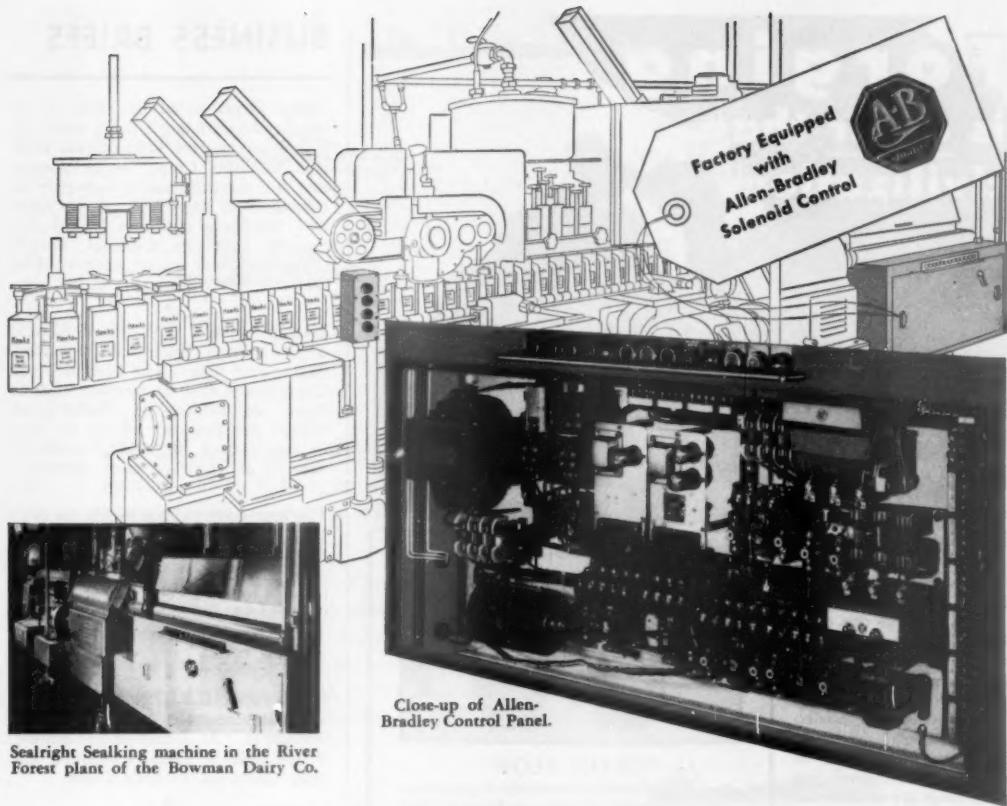
. . . That's Britain's Carrier Eagle

Radar does just about everything but wash the dishes on the British Navy's new aircraft carrier, the Eagle. The ship is swathed in secrecy.

But it is quite generally known that its 4.5-in. high-angle guns and multi-barreled Bofors can be automatically trained by radar to fire on jet planes at 600-mph. speeds. Other electronic gadgets pinpoint distant targets and help the Eagle's own airplanes to get home.

The Eagle—named for the famous old workhorse of the World War II Mediterranean fleet—is the first carrier tailor-made to fly off jet planes. It can launch one craft every 20 seconds and is Britain's fastest carrier.

The upper photo shows the stern of the Eagle as it headed into the Firth of Clyde for trials held in a full gale. Lower picture shows the elaborate radar installations and the numerous bulges for gun mounts.



Sealright Sealking machine in the River Forest plant of the Bowman Dairy Co.

Close-up of Allen-Bradley Control Panel.

Sealright Sealking FRESH MILK PACKAGING MACHINE operated by Allen-Bradley Control Panel

Sealright Sealking fresh milk packaging machines automatically sterilize, form, fill, and seal the plastic coated cartons in the dairy from flat blanks . . . efficiently . . . at high speed. Complete sanitary protection is provided. A clean, neat looking package results. Reliable Allen-Bradley controls operating this machine help to assure continuous dairy operation.

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Bulletin 800T
Control Station



Bulletin 849
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Bulletin 709
Solenoid Starter



Bulletin 702
Contactor



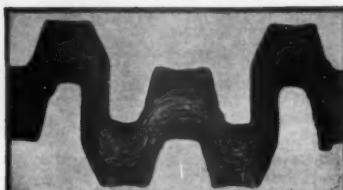
ALLEN-BRADLEY SOLENOID MOTOR CONTROL

QUALITY

Forging is older than civilization



ARCHEOLOGISTS agree that while true man has been on the earth for from 40,000 to 50,000 years, no longer ago than 6,000 B. C. did civilization—which is a combination of the fundamental techniques of domestication of animals, agriculture, horticulture, pottery, brick-making, spinning, weaving and metallurgy—come into existence. Yet the hammer, the first of man's implements goes back beyond the age of true man to Neanderthal man (100,000 years ago).



"GRAIN FLOW"

One of the outstanding characteristics of forged metal parts, as contrasted with metal parts formed by other methods—casting, pressing, welding, etc.—is the movement of the fibers of the metal in following the contours of the part. This is known as "grain flow" and results in placing strength where it is required. The photograph above shows a section of a crankshaft forging etched to show the grain flow.

No other form of metal working is so ancient, yet so modern as forging. The strength and toughness imparted to hot metal by impact is more essential today than at any previous time in man's history. Unbelievable speeds, terrific stresses and strains, split second changes in temperatures... all these make forgings imperative. Chambersburg hammers have been meeting the constantly more rigorous demands of industry for stronger forgings, tougher forgings, more accurate forgings, in greater quantities, in shorter time... for over half-a-century.

CHAMBERSBURG ENGINEERING COMPANY
Chambersburg
Pennsylvania

CHAMBERSBURG THE HAMMER BUILDERS

BUSINESS BRIEFS

Justice Dept. aimed this week at its biggest antitrust target in 10 years. In a civil suit against International Business Machines Corp., Justice, charged that the company had a monopoly by owning more than 90% of the country's tabulating machines. IBM customarily leases its machines, doesn't sell them. Stock market reaction: IBM shares dropped 9½ points in one day.

Blazing sweaters (BW-Jan.19'52,p28) drew fire from Uncle Sam this week for the first time. The Federal Trade Commission filed a complaint against Fisher & DeRitis of Philadelphia, though the company offered to burn its entire stock of \$30,000 worth of sweaters and brushed rayon material.

Tin now costs manufacturers an extra 18½ a lb. RFC, sole buyer of tin for the U. S., raised the price this week from \$1.03 to \$1.21½ a lb. Reason: the deal to buy 20,000 tons of Malayan tin at \$1.18 a lb. (BW-Jan.18'52,p23). The extra 3½¢ is transportation and handling cost.

Union Pacific R.R. is going to bypass a Wyoming upgrade to speed freight movement. At a cost of \$16-million, it will build a 42-mi. westbound line from Cheyenne to Dale Creek.

Second-line auto tires are coming back. Goodyear was first to announce a line at 20%-25% below first-line tire prices. In December the government lifted its ban on second-line tires.

Oregon is trying again to get the Voluntary Credit Restraint Committee to approve \$40-million of veterans' bonds (BW-Sep.22'51,p28).

First public offering of stock was announced by Owens-Corning Fiberglas Corp. Around Feb. 7 the company will put 630,000 shares of \$5 par common on the market. It is trying to establish a market for its securities.

A new sulfuric acid plant and a polymerization plant will be built this year at Port Arthur, Tex., by Gulf Oil Corp. The acid plant is to turn out 300 tons a day, increasing the Gulf refinery's capacity for acid-making by 150%.

Candlemaking no longer interests Socony-Vacuum Co., Inc. After 50 years in the business Socony sold its candle business to Will & Baumer Candle Co. of Syracuse, N. Y.



Sperry Radar keeps sharp eye
on above-water hazards for
Holland-America's 900
passenger liner RYNDAM.

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LABOR



WARMING UP for the fight over the Republican nomination, Sen. Wayne Morse (left), staunch Eisenhower rooter, will do his best to keep Taft on the hook, as . . .

Foes Make It Tough on Taft

Anti-Taft forces in both parties are warming up for some fancy political footwork in the Senate to keep Taft out of the Presidential race.

Republican maneuvering between the forces of Sen. Taft and Gen. Eisenhower is bound to affect labor legislation in this session of Congress.

• **Leaning in the Wind**—Taft, the candidate for President, will do his best to keep from showing any antilabor bias. He already has enough to answer for in the Taft-Hartley law. So he won't make another move that would give union leaders additional ammunition to use against him. Quite the contrary, Taft of late has been leaning labor's way.

Taft's effort to get off the hook will encounter opposition not only from union leaders but from other senators as well, particularly those behind Eisenhower. These Republicans, and the northern Democrats, will do their best to display Taft as antilabor. If they can do this, it would help Taft's Republican opponents for the nomination by strengthening the "he can't win" chorus. And if he does get the nomination, it will help the Democratic candidate in November.

• **Clear Focus**—That is the thinking of anti-Taft people in both parties. It explains why the Senate will make some labor investigations, hold some hearings, sidetrack others. It explains

why some labor bills will be pushed, others ignored.

There will be considerable in-the-family fighting. It will be focused in the Senate committee on labor and public welfare and, more specifically, in the subcommittee on labor and labor-management relations. That's where Taft's Republican opposition on labor is concentrated.

• **Will Do Their Best**—The Republicans on the subcommittee, besides Taft, are two Eisenhower supporters, Wayne Morse of Oregon and Irving M. Ives of New York. Other Republicans on the full committee are Richard Nixon of California, a Warren supporter, and H. Alexander Smith of New Jersey and George Aiken of Vermont, who are noncommittal on the nomination fight.

But it will be primarily Morse and secondarily Ives—experts in their own right on labor questions—who will do most to keep Taft on the hook.

• **Getting in Practice**—Preliminary maneuvering became evident as soon as the labor committee decided on funds for the work of the labor-management subcommittee. Over Taft's objection, the subcommittee's appropriation for this calendar year was raised to \$105,000 from the \$77,000 allowed last year.

Ives and Morse voted for the increase. The more funds the subcommittee has, the more trouble it can make for Taft through investigations, hearings, and issuing of reports.

For example, the subcommittee—headed by pro-labor Sen. Humphrey of Minnesota—this week issued a 67-page report on how the Atomic Energy Commission has barred its contractors from dealing with the left-wing United Electrical Workers as a security step. A few weeks ago it issued as a subcommittee document the full texts of the CIO's reports expelling 11 unions for following the Communist Party line.

• **Plainly Seen**—Publication of the documents by the subcommittee is preliminary to hearings on whether the problem of Communist union leaders can be solved through legislation. Their purpose seems obvious: to show that the non-Communist affidavit rule of Taft-Hartley has not been effective in cleaning Communists out of union leadership and that steps have had to be taken outside the T-H law.

No major change in Taft-Hartley is contemplated. President Truman has asked only for improvements, not repeal. Taft cosponsored with Humphrey the only improvements made thus far—dropping union shop elections. And they have also cosponsored the one amendment of T-H that has much of a chance this year—legalizing the closed shop in the construction industry.

• **A Starter**—Taft will be put to his first test on two pieces of legislation: mine safety and fair employment practices.

Hearings were to begin this week on the Neely bill giving federal coal mine inspectors authority, now exercised only by the states, to enforce safe mining conditions. Taft tried to get a week's extension. Coal mine operators were drafting their own substitute bill, figuring that Congress was in a mood to pass a tougher mine safety law. They felt it was better to offer their own bill than just to fight the Neely bill.

• **A Voluntary Approach**—Next month the Humphrey subcommittee has set hearings on bills by Humphrey and Ives for an enforceable antidiscrimination law. Morse and others on the committee have joined in sponsoring one or the other bill. Taft doesn't go along with this method. He favors a "voluntary" approach to fair employment practices, and his strategy has been to be ready with such a plan in a substitute bill to offer on the floor of the Senate when legislation comes up. He has never been able to do it because of



Bet your shirts (pajamas, sheets, and pillow cases, too)

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TEXTILES used to present a ticklish merchandising problem.

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parency actually flatters the product, speeds inspection and sales.

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Pliofilm, a rubber hydrochloride—T. M. The Goodyear Tire & Rubber Company, Akron, Ohio

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filibustering and parliamentary maneuvering, which killed FEPC legislation before Taft needed to step in. The same thing will happen again. During the hearings, however, Taft will be cast

in a role opposing FEPC legislation. This will hurt him in the North, but won't cost him as much delegate strength as he would lose in the South by supporting the Ives version.

Some WSB Rules Will Survive

Final settlement of steel wage dispute won't mean that all the board's regulations will be junked. Some will be seriously affected, but others aren't relevant to the row.

It's widely assumed that final disposition of the steel wage dispute will dump all existing wage regulations into the ash can. This won't happen. It is highly probable that some wage rules will give way. But many others are certain to stay in effect; they're not relevant to issues in the steel dispute.

You can expect the ultimate steel wage boost to have its greatest impact on those Wage Stabilization Board regulations governing wage increases aimed at keeping up with the cost of living and fringe benefits. New standards may be set for administering the rules on raises eliminating interplant and intraplant inequities. Perhaps a new interpretive basis will be set for regulating merit, promotion, and similar raises.

The basic wage freeze was contained in General Wage Stabilization Regulation No. 1, put into effect by the Economic Stabilization Administrator on Jan. 26, 1951. This froze all wages, salaries, and compensation at the level of the day before and provided that any change must be approved in advance by WSB. And it empowered WSB to regulate wages—which led to the following string of 19 defining, clarifying, and thawing regulations:

No. 1 defines the "wages" to be regulated.

No. 2 O.K.'s wage changes negotiated before Jan. 25, 1951, and put into effect by Feb. 9, 1951.

No. 3 allows raises that are given to comply with minimum wage laws. But it doesn't let you raise other wages just to maintain differentials upset by the new minimums. However, Regulation 10 later permitted such increases.

No. 4 deals only with nonfederal government employees.

No. 5 unfreezes raises for merit, length of service, promotions, transfers, stepups from initial hiring rates, etc. It establishes ranges within which such raises may be given.

No. 6 provides a formula to bring wages up to prices at the time of the freeze. With some reservations, it allows all raises up to 10% above the level of Jan. 15, 1950.

No. 7 involves employees of some types of nonprofit institutions.

No. 8 allows wage boosts based on the cost-of-living index to exceed the 10% allowed by Regulation 6. Basis for the boosts are index rises after Jan. 15, 1951. This is the so-called General Motors regulation, legalizing escalator contracts. It is broad enough to allow semiannual wage adjustments even when contracts do not call for automatic escalators.

No. 9 sets up procedures for establishing wage rates in new plants. Industry and area practices are the chief yardsticks.

No. 10 permits raises to preserve "tandem" relationships—where boosts for one group of workers historically follow those of another group.

No. 11 covers farm labor.

No. 12 sets up the Construction Industry Stabilization Commission to regulate wages in the building trades, subject to WSB approval.

No. 13 takes fringe benefits from under the ceilings set by Regulation 6. Among other things, the order covers vacations, holidays, special premium pay, shift bonuses, call-in pay. Health and welfare benefits (now covered by Regulation 19) are excepted; so are pensions, which are still being discussed by WSB. On petition, WSB allows fringe raises to bring benefits up to area and industry norms.

No. 14 permits established bonus plans to continue and permits some bonuses not covered by any such plan. Some changes in bonus payments may be made automatically, others must be referred to WSB.

No. 15 regulates adjustments in incentive and piecework rates.

No. 16 exempts Puerto Rico, the Virgin Islands, and the Panama Canal Zone from wage controls.

No. 17 invites petitions for WSB approval of raises aimed to eliminate interplant inequities. General standards for getting approval are set.

No. 18 sets standards for boosts aimed at intraplant inequities.

No. 19 sets rules for new or amended health and welfare programs. In general, plans conforming to orthodox practice will be O.K.'d automatically. Others will be referred to WSB's tripartite health and welfare committee.



ONE SECTOR OF FERRO'S FRONTIER

How to slice heat and time

This little dial can select heat to a split degree. It can stop motion in a split second. It will select any infinitesimally divided quantity of maximum wattage, from 3% to 100%.

It is used on fine electric ranges. But it could be applied to industrial equipment. *Yours, for instance.*

Where you might want to apply such infinitely precise control, only you would know—perhaps in a new chemical process, perhaps in a new mechanical development.

How you can apply this control, we know—or can find out for you.

In industry today, problems often transgress

the boundary of one science—go beyond physics, for instance, and enter chemistry. Ferro, working on plastics or metal finishes or even heating units, often finds itself in neither chemistry nor engineering, but in a realm where the two co-ordinate.

Our subsidiary, Ferro Electric Products, makes the dial control. But the application of this and other Ferro products to your problems may be solved in any of our diverse divisions, which together function on that horizon where engineering teams with chemistry.

You can reach this team for your advantage at Ferro Corporation . . . Cleveland 5, Ohio.



OUR FRONTIER IS ENGINEERING
TEAMED WITH CHEMISTRY...



Which METAL ALLOY best suits your fastening needs?



SILICON BRONZE bolts and nuts, both stock items at Harper, are widely used on power line equipment for their high tensile **STRENGTH** and **CORROSION-RESISTANCE**. Fastenings of this metal give dozens of years of service without failure.



STAINLESS STEEL bolts and nuts, because of their resistance to **CORROSION** and **HEAT**, are used to secure bubble cap assemblies in distillation towers. Depending on the application, other alloys such as **COPPER** and **MONEL** also are used.



MONEL and **NAVAL BRONZE** fastenings assure trouble-free operation for marine equipment such as this sewage pump. They are selected because of their resistance to salt water and other highly **CORROSIVE** chemicals.

HARPER has the products
and the answers!

Regardless of what your need may be—if it calls for top quality bolts, screws, nuts or fastening accessories in non-ferrous or stainless steel—Harper can help you.

Over 7000 different items in stock and ready for delivery from warehouses and distributors coast to coast—backed by mass production facilities and a group of fastenings specialists who know alloys.

For further information or help on your own problems,
mail coupon today.

SPECIALISTS IN
ALL NON-CORROUS METALS

HARPER

EVERLASTING **FASTENINGS**

Chief Metallurgist—The H. M. Harper Co.
8225 Lehigh Ave., Morton Grove, Ill.

() Send Catalog () Our problem is:

Name: _____

Address: _____

Assured Wage...

... agreement that CIO made with Revere Sugar is talking point in a new drive for guaranteed annual pay.

CIO's demands for a guaranteed annual wage aren't just talk this year. Unions in steel, meatpacking, and other industries are putting on real pressure for employer concessions that will at least advance the guarantee idea.

Timed strategically to the start of guaranteed-annual-wage discussions before a Wage Stabilization Board panel Feb. 1, a CIO publicity campaign last week began playing up a new assured-wage contract at Revere Sugar Co.'s refinery in Boston.

The plan is "by no means ideal and can and will be improved upon" over the years, says CIO. But it calls the assured-wage program there something to build on.

• **Starting Point**—For management generally, that may be the most important thing about the Revere plan: It indicates what the unions consider an adequate—though by no means the minimum—starting point for an annual wage.

Revere negotiated the plan with the United Packinghouse Workers (CIO)—one of the hottest advocates of the guaranteed annual wage. Under the program, any employee "in continuous employment for a year" is assured of 1,900 hours' work between Oct. 1, 1951, and Oct. 1, 1952.

Paid vacation time and holidays are included in the 1,900-hour minimum—so, according to Revere, the company is actually guaranteeing only about 1,700 hours of work. If an employee refuses work assigned to him, the time lost is counted against his guaranteed minimum. So is the time he loses in disciplinary layoffs, labor disputes, and similar unexcused absences when work was available.

• **Escape Hatches**—Additionally, Revere insisted on release from its commitment to pay for 1,900 hours' work if (1) government controls on supplies or restrictions on the company's marketing policy reduce operations by 25% or more; and (2) if operations are curtailed due to accidents or natural causes.

Revere's operations aren't seasonal, but they do fluctuate during the year. Generally, regular employees average about the 1,900 hours of work set in the plan. So Revere doesn't anticipate any marked increase in costs.

UPW had demanded the guaranteed annual wage before at Revere—as with other employers. Last fall it struck in support of the demand.

Alemite "Friction Fighters" WENT TO WORK HERE!



ADDED: More Production from Each Machine
REDUCED: Stock Spoilage and Down-Time
SAVED: A Total of \$4,247 Every Year



Friction was once a daily menace—and a costly one—in this Chicago plant.* Protected only by old-fashioned methods of lubrication, this company's mammoth high-speed presses were breaking down with alarming frequency. Stock spoilage was high. Oil consumption ran to \$5,664 a year.

Then, a trained Alemite "Friction-Fighter" specialist was called in to work with

the plant engineers. After a month's test on one press an Alemite Mechanized Lubrication System was installed on all five machines in the plant at a total cost of only \$2,471.

Since that time, there has not been a single breakdown or bearing loss, stock spoilage and down-time have been greatly reduced, and lubricant cost has been cut to \$1,417! This is an annual saving of \$4,247, in addition to more production gained from each press, and a

For industry, Alemite Centralized Lubrication Systems add productive time to machines with faster, more efficient handling and application of lubricants.

Lubing . . . transferring . . . applying! Alemite Mechanized Lubrication Methods save time, save work, keep lubricants refinery-clean barrel-to-bearing.



marked improvement in quality for increased customer satisfaction!

No matter what size or type of plant you operate, an Alemite Lubrication Engineer can show you dozens of ways of making worthwhile savings through more efficient handling of petroleum products. These are facts which you can readily confirm in your own time studies. The Alemite man will cooperate fully with your plant engineers in setting up a test. Contact your local Alemite Industrial Distributor, or mail coupon below—today!

*Name on Request.

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MEANS EVERYTHING FOR LUBRICATION

1. Methods 2. Lubricants 3. Equipment

FREE! New Booklet

Please send me:

"11 Ways to Cut Production Cost."
 Include Facts on OIL-MIST—the amazing new system that atomizes oil, circulates it to bearings under pressure.

ALEMITE, Dept. B12
1850 Diversey Parkway, Chicago 14, Ill.

Name.....

Company.....

City..... State.....



POLISH-BORN plumber didn't know much English, but he's pulling his weight at Einco Corp. in Salt Lake City.

DP's Ease Squeeze on U.S. Skills

(Story starts on page 39)



EX-HUNGARIAN army officer is a core-man at National Malleable & Steel Castings.

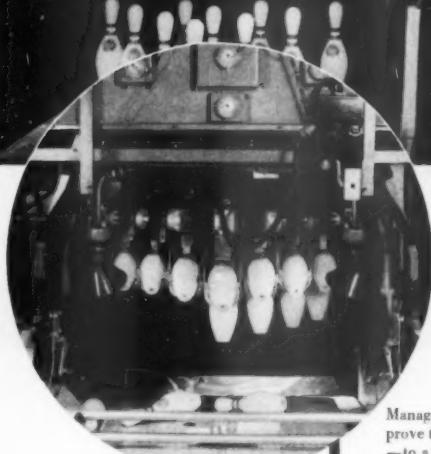


REFUGEE NURSE boned up on American techniques, resumed her old career.



LITHUANIAN professor is a mechanical engineer at Addressograph-Multigraph Corp.

The AMF Automatic Pinspotter AIDED BY MICRO Precision Switches



In the master control box, behind the Pinvisor, nine MICRO precision switches control every movement of the Pinspotter cycle. The cycle is initiated by the first ball striking the Pinspotter rear cushion. Six other MICRO units perform other important functions during the operation cycle.

Management men who are striving to improve their products—or create new ones—to a point where they may revolutionize present standards of efficiency and performance may well find inspiration in the achievement of American Machine & Foundry Company. The sensational new AMF Automatic Pinspotter has made bowling's long-cherished dream come true; here is a fully automatic unit for setting tenpins, returning the ball and performing more efficiently all pit services hitherto done by hand.



... makes bowling's
"big dream" come true!

AMF incorporates 15 MICRO Precision Switches in each Pinspotter: nine MICRO units control the cycle of operations in the "brain"; six others are used to control pin-sweeping and ball-return mechanisms, to count the pins, and to insure safe operation. Engineers of AMF chose MICRO controls "because of their high repeat accuracy and long cycle life."

If you make—or plan to make—products involving a precision-switch application, it will pay you and your design staff to find out how MICRO controls can serve your specific needs. A MICRO SWITCH field engineer will gladly show you how, and why, "the use of MICRO Precision Switches is a principle of good design." Call or write the branch nearest you.

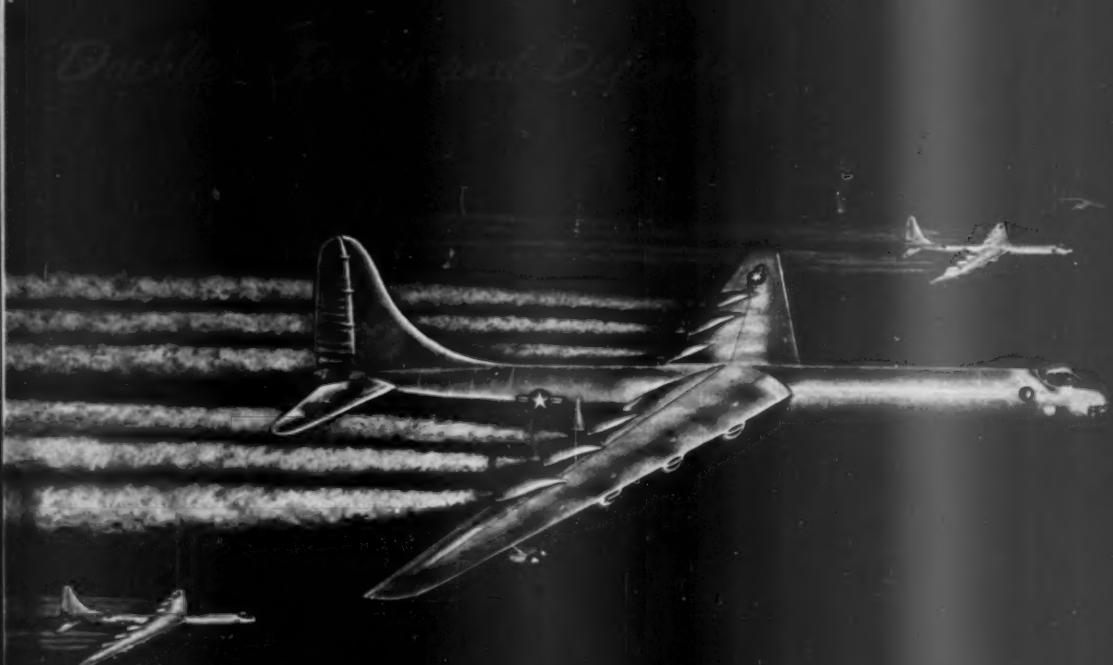
MICRO ^{MS} SWITCH

FREESTON, ILLINOIS

MICRO Snap-Action Switches . . . Honeywell Mercury Switches



A DIVISION OF MINNEAPOLIS-HONEYWELL REGULATOR COMPANY



In every B-36 Bomber there are more than 30,000 Die Castings produced by Doehler-Jarvis Corporation. From tail to wing tip, from bomb bay to controls, Doehler-Jarvis Die Castings, of Aluminum, Magnesium, Brass and Zinc alloys, help keep America's airborne fleets in fighting trim.

Men, facilities and research combine at Doehler-Jarvis to turn Die Casting problems into Die Casting progress. Manufacturers in practically every industry profit from Doehler-Jarvis' ability to find tomorrow's better way today.

Doehler-Jarvis Corporation

THE WORLD'S LARGEST PRODUCER AND FINISHER OF DIE CASTINGS

PLANTS AT TOLEDO, OHIO • POTTSSTOWN, PA. • GRAND RAPIDS, MICH. • BATAVIA, N.Y. • CHICAGO, ILL.

EXECUTIVE OFFICE: 386 FOURTH AVENUE, NEW YORK, N.Y.



Last Call for Skilled DP's

Displaced Persons Commission is scraping the bottom of its skilled workers' barrel. Prospective employers should place their job offers not later than mid-February.

The next six months will wind up the displaced persons resettlement program and thus end what proved to be a welcome, if unexpected, labor windfall for American industry.

The DP program was conceived as a humanitarian gesture toward Europe's war-stricken, homeless peoples. Its success in those terms may be a controversial matter, but as a labor source for U.S. employers it was manna from heaven. Just as postwar manpower shortages began to develop here, the DP's began to arrive. Nearly 200,000 of them went right into industry. And many of them had skills badly needed in defense work.

• **A Mere Trickle**—A few more skilled workers will be brought in during the next six months, but not nearly so many as before. The inflow of DP's has now been reduced to a trickle and will stop at the end of June. The Displaced Persons Commission wound up the major part of its big mission at yearend. Its only job now is to bring in some 28,000 "expellees or orphans"—as distinguished from legally defined displaced persons.

Most expellees have a common German heritage, although they come from Poland and Middle European countries—their homes before they fled Communist domination. Most think and speak like Germans. Many come from farms. However, some—nobody knows how many—have special, needed skills.

• **Top Priority**—DPC is giving priority to processing the skilled workers and has about 6,000 expellees listed as skilled or semiskilled in 11 occupations on the Labor Dept.'s list of critical jobs. They include hard-rock miners, machinists, tool-and-die makers, machine-shop operators, sheet-metal workers, molders, welders, terrazzo workers, lumber men, and trained nurses.

Before any of these can enter the country, they must be cleared on health, security, and financial responsibility. At the end of December some 250 skilled workers were fully cleared and waiting for job offers.

Others of the 6,000 skilled and semiskilled expellees were still being processed—sometimes a long, slow job. And the DPC was sifting through applications for the remaining 22,000 visas under the "expellee and orphans" quota. There will be some workers with special skills in this group, but most will be farm or domestic workers.

• **Time Element**—Finally cleared expellees can get here in about two

months. Those needing only security clearance can make it, on the average, in about three months. The others need six to eight months, depending on whether they are partly processed or are starting from scratch when offered a job. That means an employer shopping abroad for skilled help can get it in two months, if lucky, but it might take as long as eight.

• **Agencies at Work**—Anyone interested in hiring expellees with specific skills—or, for that matter, any of them—can get plenty of help. Religious organizations, including Catholic, Protestant, and Jewish groups, have been instrumental in bringing in 85% of the DP's so far. They help them get housing—without displacing an American—as required by law and aid in getting them jobs at "prevailing" wage rates for their job and area.

Prospective employers can work through religious organizations, through state displaced persons agencies, or directly through the Displaced Persons Commission in Washington. They should get their job offers in by mid-February—the sooner the better.

Specific workers can be recommended to prospective employers by European representatives of religious organizations. Otherwise, expellees are classified and assigned to jobs by U.S. Occupation analysts in Europe.

• **Census**—Since the fall of 1948, when the first boat load of these "new Americans" entered this country, 336,000 have arrived. Over half got industrial jobs, but the largest single group (28%) settled on farms, and 14% took household work.

About 50,000 DP's (15%) took jobs as bus or truck drivers, power-station operators, welders, machine feeders, and other operative jobs. Slightly fewer took jobs as laborers. And 37,500 went into jobs as craftsmen, foremen, and other high-skilled workers.

Most have worked out well in new jobs, satisfying employers and fitting easily into their new communities. Most of the industrial workers got immediate acceptance in plant unions; there was no ground for labor's traditional opposition to immigrant hands—as a low-wage replacement for American workers. DP's had to work for the "prevailing" wage; they do not displace American workers.

• **Mostly Harmony**—Only a few flare-ups have occurred over the employment of DP's. In a few industrial centers

Here are
only
4

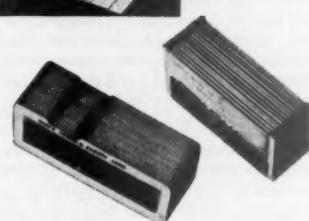
of many reasons

why addressing machine users
are switching to Elliott non-
metallic Address Cards and
silent Elliott Addressing
Machines.

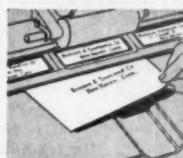
1 Elliott's soft
Rubber Print-
ing Roll makes
all Elliott Ad-
dressing Ma-
chines silent,



and 2, enables
them to print
addresses on
variable thick-
nesses.



3 Because Elliott Address Cards file
tight together, they are dust proof
as well as twice as compact.



4 Elliott Ad-
dressing Ma-
chines deliver
addressed
forms face up.



May we tell you
all about it?

Elliott ADDRESSING
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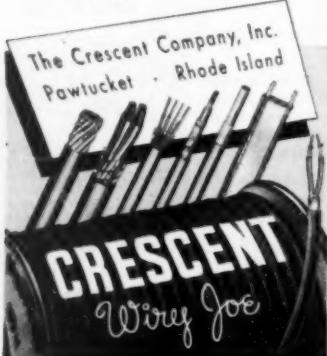
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is different
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Today, buying wire and cable involves more than specification of gauge and insulation. Crescent engineering collaboration with our customers often results in wire and cable recommendations that improve product performance substantially, increase production, and reduce costs.

Crescent engineering and manufacturing facilities are complete. Wire is drawn to size from copper bars. Insulating compounds that meet the most exacting requirements are formulated from natural rubber, synthetic rubber, and the latest plastics. Constant laboratory testing maintains uncompromising quality control right from the start.

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with rising unemployment, union locals have complained against the continued admission of DP's to this country—although none is coming into their local plants.

A few weeks ago AFL construction workers on Long Island, New York, made the sharpest attack yet on DP's. They picketed a construction project near Garden City and slugged two Latvians who attempted to report to building jobs. The AFL local protested that the contractor, himself a Latvian, was using nonunion DP's at below-union rates.

• **Move to Plug Loophole**—The dispute introduced an explosive new argument: According to the AFL local, the DP's had been admitted to the country as "agricultural" workers and had been employed originally in that capacity.

But, said the AFL local, the law doesn't restrict DP's to work as agricultural laborers for any stated period. They can get off farms through "this loophole in the law" and take better-paying jobs in industry—without bothering about prevailing or union-scale rates.

The contractor denied union charges that the DP's he employed had "escaped" farm jobs. He explained the men had been agricultural workers in their home countries, but had been trained as carpenters, bricklayers, and other building craftsmen at European DP camps, and he had guaranteed them jobs in the building trades.

LABOR BRIEFS



Cardinal outfielder Stan Musial (above) can now collect an \$85,000 salary—more than 10% over January, 1950—provided the total salary budget for the club's players doesn't rise more than

GRANODIZING WITH
TRADE MARK
GRANODINE
REG. U. S. PAT. OFF.

BONDS PAINT TO STEEL!

Automobile bodies and sheet metal parts, refrigerator and other cabinets, washing machines, projectiles, rockets, bombs, and cartridge tanks are typical of the many products whose paint finish is protected by "Granodine."

"Granodine" meets Government Finish Specifications

Write for descriptive folder

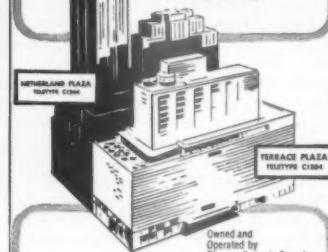
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Cincinnati is famous for
Its Magnificently Modern

PLAZA
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Owned and Operated by Thomas Emery's Sons Inc., Cincinnati, Ohio

- ✓ 1200 rooms, all outside
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- ✓ **GOURMET RESTAURANT**
Internationally famous

John G. Hersman, General Mgr.

10% above the budget for any year from 1946 through 1950. The Salary Stabilization Board decided that last week in a case that will apply to baseball salaries generally. SSB also said clubs trying to improve teams can petition for "special relief" from its ceiling.

CIO oil workers have filed strike notices under 349 contracts with refineries—a formality in bargaining under way in a wage reopening. Union hasn't announced its wage goals, but West Coast locals are on record for 25¢. WSB rules will allow only 7¢, industry people estimate.

No wage demands will be made now by 11,000 AFL millinery workers in 550 New York women's hat shops. They agree that business isn't good enough. Instead, the union will work with employers to stimulate hat sales. If business improves, a pay hike will be discussed in June.

Narcotics bylaw adopted by the Sailors Union of the Pacific (AFL) bars "using, possessing, transporting, or selling" dope. Any member who violates the rule is "subject to such punishment as the union shall decide" in union trials—including expulsion. Under most SUP contracts, that could also mean loss of ship employment.

Small employers may soon be exempt from wage controls. WSB is currently considering lifting curbs on wages paid by employers of four workers or less. CIO would set the figure at 10 (BW-Dec. 22 '51, p34).

A struck funeral home in Akron may get National Labor Relations Board attention—if the board decides it has jurisdiction. Strikers allege the firm fired two men for union activities. They were supporting AFL's Operating Engineers in the union's attempt to organize the funeral home's 18 embalmers, drivers, and other employees.

CIO steelworkers, already talking tough in the basic-steel industry (page 32), set an aluminum strike deadline last week—Jan. 31, for the Aluminum Co. of America, which employs 18,000 workers represented by USW. Union wants a 15¢ hourly raise, plus higher job rates. In the past, basic-steel terms have generally influenced aluminum settlements.

John L. Lewis, being wooed by malcontents in the United Auto Workers (CIO), has agreed to attend a UAW rally in Flint, Mich., in February, on the 15th anniversary of GM contracts. Walter Reuther, who refused to appear with Lewis at a rally last year, is expected to appear, too. Their cordiality will be all on the surface.



Plenty of Gedunk

The Navy calls it gedunk, the Army calls it boodle, the Marines call it ice cream when they get it.

Most of the Sweden Speed Freezers, made by Sweden Freezer Mfg. Co., Seattle, Wash., one of the largest ice cream freezer manufacturers in the world, are now going for use in Armed Services' camps and commissaries.

One reason Sweden Freezer production can be held at a peak, economical level is a pint-size electric relay.

Some time ago, this manufacturer

discovered that across-the-line starters in his equipment were costing him a lot of money and taking up unnecessary space. After months of testing and experimentation with circuits and loads, Ward Leonard heavy-duty midget relays were substituted. The size differential and lower operating cost paid off. Since then many thousands have been installed, many of them Underwriters' listed as motor controllers.

Ward Leonard's engineering department is ready to go to work with you, too, to help cut costs and solve control problems.

Headlines of 1900

WARD LEONARD WINS GOLD MEDAL OF PARIS EXPOSITION FOR FIRST ESCALATOR

Escalators were considered one of the seven wonders of the modern world when the first one was installed at the Paris World Exhibition in 1900.

Excited people paid ten cents for an "ascension".

The Escalator was installed using the Ward Leonard System of Control after a number of other methods had been tried and failed.

Today, Ward Leonard electric controls are still winning acclaim for successful performance in all types of electric systems.



WARD LEONARD ELECTRIC COMPANY

MOUNT VERNON, NEW YORK

Result-Engineered Controls Since 1892

RESISTORS • RHEOSTATS • RELAYS • ELECTRIC CONTROLS



Why 55 million people read this unique magazine



• The February 1952 issue of The Reader's Digest, which marks its thirtieth anniversary, has by far the largest circulation and the largest readership of any magazine in the world. There are 26 separate editions,

including one in Braille and another on records for the blind. They appear in 11 different languages and have a total circulation of over 15 million. Each month more than 55 million people read the Digest.



"Again we are involved in war, but this time with far more of international complications and difficulties in finding peaceful solutions to our troubles. The Digest performs an invaluable service in translating these problems to the general public in understandable and unbiased form."

—GEN. GEORGE C. MARSHALL



"Not fearing the high-brow nor scorning the popular, spicing both with gleanings of wit, the Digest carries

in 11 languages an intensely interesting and attractive picture of America to many foreign lands without the unpalatable flavor of propaganda."

—DOROTHY THOMPSON



"In one neat, time-saving package, The Reader's Digest hands us wisdom essential to an informed, alert citizenry in a democratic society. I have been brought up on the Digest in the thirty years in which it has blazed new magazine trails and become the publication marvel of our time."

—ERIC JOHNSTON
Former Economic Stabilizer



"The Reader's Digest is an important part of the 'must-kit' of information that every intelligent person needs."

—BERNARD BARUCH

Q. Where is The Reader's Digest bought and read?

A. In every country where people are free to read what they choose—58 by actual count. In addition, smuggled copies are read by thousands behind the Iron Curtain, frequently at serious personal risk.

Q. Where do the articles in the International Editions come from?

A. Every article has first appeared in the American edition of the Reader's Digest. More often than not, the same articles which were most popular in Kansas City and San Francisco turn out to be most popular also in Buenos Aires and Manila. *The Digest has proved that the basic interests of intelligent men and women are alike the world over.*

Q. Who are the 55 million readers?

A. In the United States, more college-trained and economically well-off men and women read the Digest than any other magazine. *Any one issue is read by 52% of all Americans who have attended college.* Sixty-one percent of Digest readers are high school graduates, though only 36% of the American population in the same age groups have finished high school.

Surveys show an equally high educational and economic level among readers of all the International Editions. In France, for example, more than twice as many people who are college-trained—more than twice as many of the well-to-do—read the Digest than any other magazine. The same holds true in Japan, Norway,

Canada and virtually every country where the Digest is published. *Digest readers have more education—have more money to spend than those of any other widely circulated magazine in the world.*

Q. Why is the Digest so popular among leaders in all walks of life?

A. Because each issue contains a wealth of ideas that stimulate thought and conversation. Because each issue is packed with material that extends mental horizons, quickens the imagination, whets one's curiosity. Because each issue gives one a keener zest for life and a sharper appreciation of the fine art of living.

Q. Do The Reader's Digest International Editions differ in any way from the United States edition?

A. Yes. The United States edition does not carry advertising, but all International Editions do.

Each of these editions, wherever circulated, is an outstanding advertising medium. This is because of the Digest's large readership among intelligent people and its recognized prestige among people of influence in business, the professions and government.

Advertisers all over the world have responded eagerly to the opportunity to advertise in the pages of this magazine, every copy of which is read by more than three people.

The list of Digest advertisers includes the great names in industry in every country of the world, the export departments of the outstanding U. S. advertisers having much the largest representation.

There are four French-language editions of The Reader's Digest (for Canada, France, Belgium and Switzerland); four in Spanish (one for the Caribbean and Central America, one for Mexico and two for South America); eight in English (for the United States, Canada, Britain, Australia, New Zealand, South Africa, Latin America and Japan); two in German (for Germany and Switzerland); and one each in Danish, Finnish, Norwegian, Swedish, Italian and Japanese.

30th ANNIVERSARY ISSUE—February 1952



WHAT U.S. AND INTERNATIONAL LEADERS SAY ABOUT READER'S DIGEST:

(The following comments have appeared in *The Reader's Digest* or are scheduled for publication)

"The Digest has proved that a free press is not limited by frontiers and oceans, and that a publication which presents the truth will be sought regardless of difficulties by those who seek truth."

—GENERAL WALTER BEDELL SMITH
Director of Central Intelligence Agency



"I am greatly impressed by the profoundly practical idealism which has guided The Reader's Digest since its inception. Here is a most promising road toward a more solid and friendly understanding among people of all the world's nations."

—H. R. H. THE DUKE OF WINDSOR



"The Reader's Digest has demonstrated that the people in this country and in many others can be interested in serious subjects. The Digest has become an important educational force."

—ROBERT M. HUTCHINS
Former Chancellor, Chicago University



"I have seen articles by and about Canadians published in Spanish, Norwegian, Japanese, Italian and various other languages by The Reader's Digest and I hope to see many more. The Digest tells 58 nations about each other. We cannot have too much of this free exchange of information if the world is to achieve trust and understanding."

—RIGHT HONORABLE LOUIS ST. LAURENT
Prime Minister of Canada



"Reader's Digest is contributing to the job of world-wide communication and understanding in a way that has always interested us at Pan American. It parallels closely our own efforts to bring peoples of the world closer together. And, because Reader's Digest is read everywhere by leaders of the business world, we find it a useful medium for our international advertising."

—JUAN T. TRIPPE, *President Pan American World Airways*



"Through its unprecedented circulation among the free peoples of the world, The Reader's Digest has contributed remarkably to the advance in mass communication."

—MILTON S. EISENHOWER, *President Pennsylvania State College*



"Civilization together with democracy progresses thanks to the diffusion of culture. Reader's Digest has given for 30 years a precious contribution to the diffusion of culture."

—VITTORIO EMANUELE ORLANDO
Former Premier of Italy



"No other periodical in all America would be quite as much missed as would The Reader's Digest, should its compact, slim little figure disappear some month from our library tables, our book stalls, our newspaper corners, our bookshelves. Much love and long life to it."

—KATHLEEN NORRIS



"The goal of international understanding cannot be achieved by government-to-government action alone. There must also be a people-to-people expression of their work and hopes. On its thirtieth anniversary, Reader's Digest is to be congratulated for its part in people-to-people communication."

—PAUL HOFFMAN, *Former E. C. A. Administrator, Now President, Ford Foundation*



"The success of your Japanese edition attests to the universal appeal of The Reader's Digest and its value as a channel for international cultural exchange. May Reader's Digest grow and prosper further in its service to humanity."

—SHIGERU YOSHIDA, *Premier of Japan*



"The unparalleled world-wide appeal of Reader's Digest represents the triumph of readability, entertainment and substance. Reader's Digest has been a notable ambassador of American democracy and good will among the people of the world."

—SAM GOLDWYN, *Motion Picture Producer*

The READER'S DIGEST—Pleasantville, N. Y.

GOVERNMENT



WASHINGTON HUDDLE brings labor attaches together with Secretary of Labor Tobin (back to mirror) for the reports and instructions on their jobs as . . .

Labor Salesmen for U.S.

According to the story some people in the Dept. of State swear is true, our embassy to the Court of St. James was caught flatfooted by the outcome of the British national election in 1945. That was the vote that made wartime hero Winston Churchill ex-prime minister and brought the Labor Party to power.

It wasn't that our diplomatic corps in London was committed to Churchill and the Conservatives. Their embarrass-

ment was that they simply had no close contacts with the group of men who were going to rule the British Empire. It was a decidedly awkward situation.

• **Finger in the Dike**—What saved the day was a young labor expert from Gloversville, N. Y., Samuel Berger. Dispatched to England first as a labor specialist attached to the Lend-Lease mission, he stayed on as labor attaché to the embassy. His job was to meet,

know, and work with the British trade union officials and their associates to help them make the most out of American aid.

He was on a first-name basis with some of the men who, in 1945, staffed the British cabinet. For a while, he was the key man in our embassy as striped pants relationships gave way to cloth cap connections.

• **Far Flung**—Berger, now attached to Averell Harriman's staff in Washington, was one of the first U. S. labor attachés. Now we have 36 in 30 different countries. As the problems and operations of labor have grown in scope and particularly in political significance, the need for full-time embassy people concerned with labor has grown, too. The labor attaché program got started in 1943 and was reorganized with the rest of the foreign service in 1946. That's when it took its present form, with control and supervision by the State Dept. and direction and cooperation from the Labor Dept.

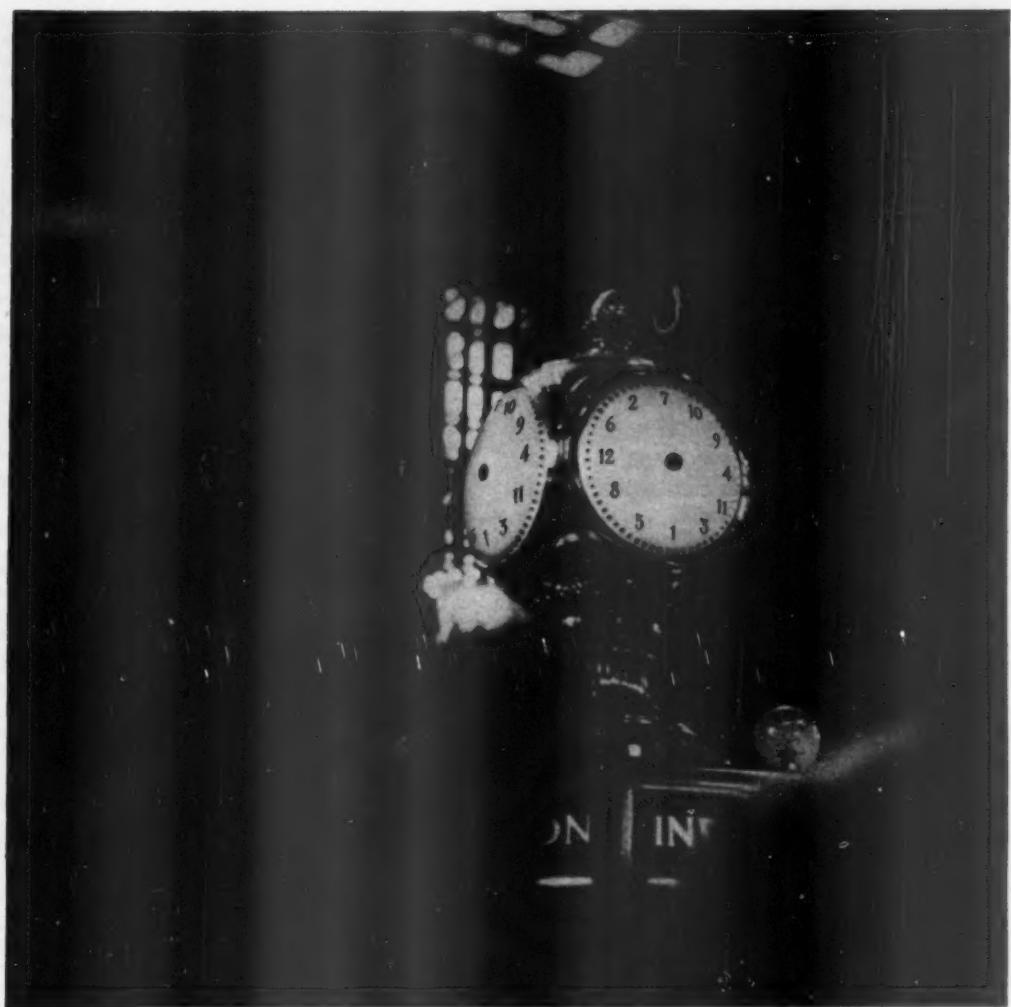
• **Report to Home Office**—Attachés consult with Washington officials periodically. Just last week a group of them were home talking to the Secretary of Labor Maurice Tobin. Technically, they are a part of either the political or economic sections of their embassies and are part of their ambassadors' staffs. But they receive a large share of their instructions and do a lot of their reporting to the Labor Dept. Before they returned to their posts, they also talked to other branches of the government, including State, the Mutual Security Agency, and Central Intelligence Agency.

I. Freewheeling Fixers

Each country has special problems, so there's no such thing as a typical day in the life of a typical attaché. The best way to describe their activities would be to call them freewheeling operators. But in general their duties require them to keep in contact with workers, labor leaders, and foreign government officials concerned with labor; make factual and analytical reports to Washington; act as labor advisers to the ambassadors; and assist in international labor activities, especially the International Labor Organization.

Besides that, they help pick labor leaders to come to the U. S. on exchange programs, help American labor and business people find their way around foreign labor circles, and do a selling job of American labor and trade unions abroad.

• **In the Middle**—Beyond these general duties, they are constantly called on to



What happened to the time?

A lot of things are scarce these days. Steel. Aluminum. Machine tools. Raw materials. So scarce, in fact, that Uncle Sam has them on a priority list.

But in American industries today, the
scarcest commodity of all is...time!

With military orders urgent, with complex new weapons in the making, *time* is the key word of our defense program.

But there's one way a manufacturer can get a "priority" on *time*.

He can ship his parts and products via Air Express—the service that gets *top priority* of all commercial shipping services!

Air Express is first off the loading platform...first on the planes...first to arrive at destinations anywhere in the 48 states!

Whatever your business, you can profit from the regular use of Air Express. Here's why:

IT'S FASTEST—Air Express gets *top priority* of all commercial shipping services—gives the fastest, most complete door-to-door pick-up and delivery service in all cities and principal towns at *no extra cost*.

IT'S DEPENDABLE—Air Express provides one-carrier responsibility all the way

and gets a *receipt upon delivery*.

IT'S PROFITABLE—Air Express service costs less than you think, gives you many profit-making opportunities.

For more facts, call Air Express Division of Railway Express Agency.





The DIVISION that ADDS

Figured glass with its many advantages is fast becoming the favorite divider for business and industry. Translucent panels protect privacy but permit borrowed light to flood rooms with soft, cheerful illumination. Interesting textures strike a modern note conducive to morale and efficiency.

NO SHORTAGES

Figured glass is a non-restricted material in plentiful supply. Rhythmic glass patterns by Mississippi can be used to solve almost every partition problem.

MODERN APPEARANCE

Architects everywhere prefer Figured Glass by Mississippi both for its functional applications as well as its beauty.

EASY MAINTENANCE

Simple to install, easy to clean, its use eliminates mortar joints . . . painting . . . refinishing. Figured Glass never wears out. If necessary, partitions can be removed and used again elsewhere.

Send for new, free booklet, "Figured Glass by Mississippi," containing nearly 100 actual photographs of installations of this versatile modern material in business and industry.

When you build or remodel, specify Mississippi glass to your architect or contractor. Available in a wide variety of patterns wherever quality glass is sold.



MISSISSIPPI GLASS COMPANY
88 Angelica Street, St. Louis 7, Missouri

Gentlemen:

Please send me your free booklet, "Figured Glass by Mississippi."

Name _____

Address _____

City _____ Zone _____ State _____

MISSISSIPPI *Glass* COMPANY

88 ANGELICA ST. SAINT LOUIS 7, MO.
NEW YORK • CHICAGO • FULLERTON, CALIF.

WORLD'S LARGEST MANUFACTURER OF ROLLED, FIGURED AND WIRED GLASS



use their connections, influence, and information to solve a variety of problems that develop between labor and government, labor factions, American and foreign labor organizations, and especially with Communist-dominated groups.

Here is how some typical attaches functioned as trouble-shooters:

- Two labor leaders were to be sent from one European country to America for a visit. The attache picked representatives of two rival groups, the Catholics and the Socialists, in an effort to smooth out some of the differences between the groups.

- When the United Labor Policy Committee pulled out of the defense program in 1951, a lot of labor people around the world took it to mean that American labor was no longer backing the defense effort. It was up to the attaches to explain that this move had nothing to do with labor's support for the government and was mainly a dispute over procedure.

- In the Caribbean, a group of union dock workers refused to unload a shipment of marble from an American company as a demonstration against "Yankee imperialism," so the attache talked to labor people he worked with, and they got the men to unload the ship.

- Labor's Champions—In practically every country, one of the biggest jobs of the attache is to convince labor people that the American worker isn't the exploited wage slave that Communist propaganda paints him. It's a big victory when an attache can help get across to foreign workers that their American counterparts are organized, recognized, even protected by the government, and that American labor leaders take part in government policymaking.

- Labor of Love—There's no rule on who or what you have to be to qualify for the post of labor attache other than general foreign service requirements. About one-third of the attaches are career foreign service officers, another third are government people who have dealt with labor problems, and the rest have come out of the American labor movement. The job requires a background in economics, labor problems, and international affairs, but above all it demands a knowledge of the language of labor. If you covet such a post, the best way to get it is to have both AFL and CIO endorsement.

But attaches don't represent American labor organizations directly as do other overseas people such as labor officers for Mutual Security Agency. They may serve as liaison between U.S. and foreign labor, but they are viewed strictly as American government officials. And in order to overcome the distrust for U.S. officials that many foreign labor leaders feel, they have to be

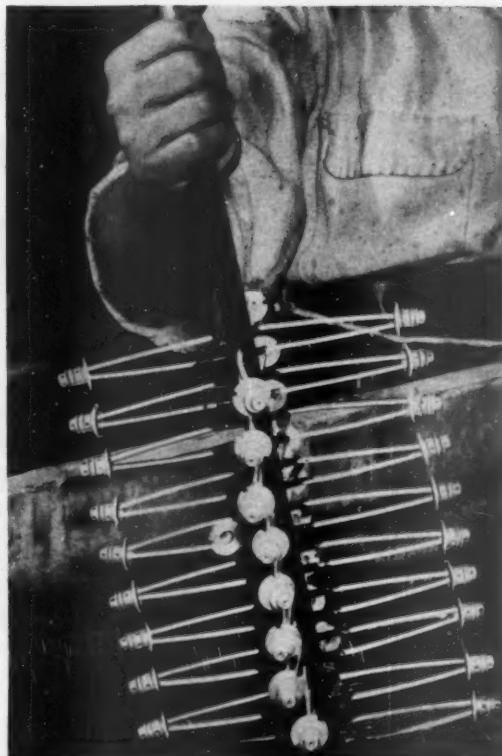
HOW TO KEEP COOL IN AN ACID BATH

Aluminum items for a multitude of purposes are "anodized" as protection against abrasion and corrosion. Anodizing also permits the surface of the metal to be dyed various colors. The aircraft industry makes wide use of this in color-coding parts and fittings for fast, positive identification. But there's a trick to the process!

Acid must be cooled. Uniformity of color requires precise control of the anodizing process. Sulphuric acid, in which the parts are immersed, must be kept at constant temperature, in spite of the heat induced by high-amperage electrical current. The problem has been solved, simply and economically, by a Frigidaire cooling system which holds the acid bath at exactly the right temperature for perfect anodizing.

Whatever your own refrigeration or air conditioning problems may be—you can meet them quickly and inexpensively with Frigidaire equipment. You'll find over 400 different products in this most complete, most dependable line in the industry. And your Frigidaire representative can easily help you take advantage of Frigidaire's experience in solving problems akin to yours.

Call your Frigidaire Dealer, Distributor, or Factory Branch. Look for the name in the Yellow Pages of your phone book. Or, write Frigidaire Division of General Motors, Dayton 1, Ohio. In Canada, Leaside (Toronto 17), Ontario. And be sure to get Frigidaire's free Refrigeration Security Analysis of your present refrigeration costs and future needs.



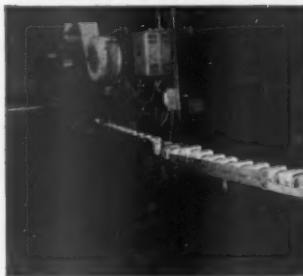
FRIGIDAIRE



Over 400 Refrigeration and Air Conditioning Products for Offices
Laboratories • Processing • Precision Assembly • Storage • Plant
Lunchrooms • Medical Departments • Water and Liquid Cooling



Glass wings for man-made birds require refrigeration, too! Spun-glass cloth, impregnated with resin, is used for airplane wing coverings. And resin must be stored at a constant 40° to keep its fluid state. A Frigidaire forced-air cooling unit, plus compressor, does the job!



Speeds packaging operation. In hot weather, waxed wrapping paper often sticks to wrapping machine rollers, making frequent shut-downs necessary. A soap manufacturer found the answer in a Frigidaire compressor and cooling unit which cool the paper *before* it enters the machine!



Refrigerator full of potential pictures! A large user of photographic film and paper stores quantities of both in a 17-cubic-foot Frigidaire—where it keeps perfectly, far past the "expiration" date, thanks to ideal film storage temperature. Exposed film keeps ideally, too!



The Olivetti 14/51 fully automatic printing calculator answers quickly, simply and in permanent printed form every figuring requirement of your business—without special operator training. Olivetti offers easier automatic short-cut multiplication (by unique, separate keyboard), automatic division, fast addition and subtraction, credit balance. Total capacity 999,999,999.99.

*Olivetti Corporation of America, 580 Fifth Avenue, New York 36.
Over 270 sales and service points throughout the United States.*



"BRITAIN'S big problem," said Glenn Atkinson, "is boosting output per worker."

able to deal with them in their own terms. The very success of the attache function depends on this ability to a great extent.

II. A Cross-Section

The group of attachés that just visited Washington represents a pretty good cross-section of attachés' backgrounds and problems.

• **Organizer**—Glenn R. Atkinson, attache in London, for instance, comes out of the trade union movement. In the 1920s he was an organizer for Amalgamated Clothing Workers of America. From 1928 until he went to London in 1950 he was an assistant to the president of the Brotherhood of Railway Clerks (AFL) with time off for a hitch with the wartime Office of Price Administration and later with the Labor Dept. as an economist.

Part of Atkinson's job in Britain has been to work with British unions on the big problem of increasing productivity and to show them that American unions have accepted the idea of "increasing the pie to get a bigger share rather than trying to get a bigger piece of the old one." Atkinson said that the British Trade Union Congress and the national unions are working among their members as well as with industry to boost output per worker, but he pointed out that the traditional reluctance of workers to work themselves out of jobs has yet to be overcome completely. He said that productivity of coal miners has increased since prewar days, but a decrease of miners plus an increase in domestic coal use is the real cause of current decreased exports.

"It will be difficult to bring Italian workers into British pits," he said, "be-

"The Odds are 4 to 1

You Can Cut Your Painting Costs With The On-The-Wall Test"



Figure it this way. Labor represents 80% of the average cost of maintenance painting . . . four times the cost of the paint. So if you're looking for savings . . . real savings . . . make this simple test.

Take two equal wall areas in your building and let your painter paint one with Barreled Sunlight and the other with any other good brand of paint . . . both paints thinned according to directions, of course. Clock the time it takes to paint each area and see how much faster and better your painter can work with Barreled Sunlight. Project the time he saves with Barreled Sunlight into terms of a complete painting job, and you'll realize that you can enjoy the long-lasting quality of famous Barreled Sunlight and *still save money on your painting costs.*

Yes, you may pay a little more per gallon for Barreled Sunlight but it will go farther and faster on the wall. It will give you a better-looking, longer-lasting paint job *for less money than any other paint on the market.* Let our representative help you make this money-saving test. Write and he'll call.

BARRELED SUNLIGHT PAINT COMPANY, 1-A Dudley St., Providence, R. I.

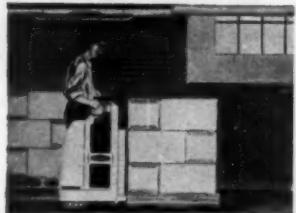
Barreled Sunlight®
Paints

In whitest white or clean, clear, wanted colors,
there's a Barreled Sunlight Paint for every job

IT ALWAYS COSTS MORE NOT TO PAINT!

For over half a century the symbol of quality and dependability among paint buyers for leading industrial, institutional and commercial buildings

What do you want in an electric truck...

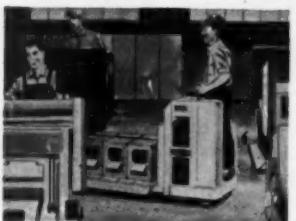


SPEED?

Clock this new RAYMOND Low-Lift Electric Truck—see how it speeds up long hauls, stock picking, loading, unloading! Actually travels up to 6 mph empty, up to 5 mph loaded—features fast starting and stopping. Operator rides in a safe standing position, protected by metal guard.

SPACE-SAVING?

More room for storage and production too—that's another plus the RAYMOND Low-Lift offers! It's so short, it right-angle picks up and spots unit loads in aisles only 5-ft. wide. Just think of the space you can save per aisle.



MANEUVERABILITY?

Use the RAYMOND Low-Lift in narrow aisles and cramped production areas previously inaccessible to hand trucks alone! See how easily it operates in truck trailers, boxcars, elevators. The secret — its short length and patented* off-set drive wheel with 200° turning arc.

LIGHT WEIGHT?

No more time lost moving materials from one floor to another! The light-weight RAYMOND Low-Lift operates safely on low-capacity elevators, on lighter-capacity floors—has patented* knee-action swivel caster to compensate for uneven floors.



LOW-LIFT • RIDER-TYPE ELECTRIC TRUCK

GIVES YOU ALL FOUR!

*Patent No. 2,564,002

SEND FOR BULLETIN

The RAYMOND CORPORATION

Formerly LYON-Raymond Corporation

5265 Madison St., Greene, N.Y.

Gentlemen: Please send me Bulletin 750, which tells the full RAYMOND Low-Lift Electric Truck story.

Name _____ Title _____

Company _____

Street _____

City _____ State _____

MODEL EL4F for single and double-face pallets. Capacity 4,000 lbs. Also available for handling skid platforms—Model EL4P.



ELECTRIC INDUSTRIAL TRUCKS
HYDRAULIC ELEVATING EQUIPMENT



FRANCE has kept wages "a little ahead of the cost of living," Eldridge reported.

cause although labor leaders have endorsed the idea, the miners aren't too happy about it. They feel that Italian workers—they aren't miners for the most part—won't be careful and aware of dangers—they may smoke in danger areas, and that kind of thing."

• Economist—Richard Eldridge, at the embassy in Paris, served two years in the French army during World War I. From 1926 until 1932 he was with the International Chamber of Commerce in Paris, and then he came home to go to work for the U.S. government, first with NRA, later with the State Dept. as an economist. In 1944 he was sent to Paris as labor attache.

His long stretch in France gave him an insight into the minds and problems of the French. In general, Eldridge said, the French political and labor situation is "stagnant, but more forward looking than it has been in years." For the most part France has full employment, "so the Communists can't make any headway, but wages and working conditions aren't so good that the anti-Communist Force Ouvrière and Confédération Française des Travailleurs Chrétiens can get anywhere in organizing either."

• Credit Where Due—Eldridge gives credit for recent changes in management wage policies to George Villiers, head of France's version of the National Assn. of Manufacturers, Confédération National du Patronat Français.

Eldridge feels that Villiers has made a big dent in the hide-bound antilabor policy of French employers and that a continuation of this policy of American-style enlightened labor relations can go a long way toward keeping the Communists at bay.

One problem both Communist and anti-Communist labor unions have to



Who put comfort on the Q.T. at S.M.U.?

Comfort's *always* on the Q.T. when it's supplied by a Carrier Conduit Weathermaster* Air Conditioning System.

There's a Conduit Weathermaster System installed in the Fondren Science Building at Southern Methodist University. It keeps the air fresh and clean and at proper temperature the year round for clear thinking. And the beauty of it is the quiet.

What little noise there is from the equipment is kept in the basement, all in one place. The 263 room units have no moving parts, like motors or fans. They get filtered, dehumidified air from the central station through conduits, then distribute it evenly and silently.

There's no wiring or heavy maintenance in the rooms. Servicing and filter-cleaning are all done in one place, at the central station.

A Conduit Weathermaster System will fit into anybody's plans. Vertical or horizontal buildings, there's no restriction on design. And installation costs are held down by standardized prefabricated fittings.

There's more to the Conduit Weathermaster story, of course. Complete details are yours for the asking. Just write for our booklet, "Conduit Weathermaster System." Carrier Corporation, Syracuse 1, New York.

*REG. U. S. PAT. OFF.



Inside the Fondren Science Building at Southern Methodist University: one of the comfortable classrooms, and one of the two Carrier Centrifugal Machines which supply refrigeration for the Conduit Weathermaster System. Mark Lemmon, architect; Zumwalt & Vinther, engineers; Martyn Bros., Inc., mechanical contractor.



An old tune... on a modern instrument

Occasionally there's a craftsman who shapes each piece of metal as if he were completing a sacred trust. The thrill of his work... the deep pride within him... and the honest will to do a good job is the song he works by — a song played often on the modern machinery at Taft-Peirce.

The Principal Product of Taft-Peirce Is Skill

Basically, Taft-Peirce is a contract manufacturer. Hundreds of craftsmen, over a thousand modern machine tools, and a complete staff of design and production engineers are devoted to serving our nation's leading companies — big and small. We can design and produce one part... or set up a production line for start-to-finish production of a complicated product. And whatever we do is done well.

Naturally our 450,000 sq. ft. of manufacturing area and 1500 modern machine tools are pretty busy these days. But contract manufacturing is our regular line of business. It always has been. It will be tomorrow. Maybe we can be of service to you — especially if it is a long term project.



For Engineering, Tooling, Contract Manufacturing
TAKE IT TO TAFT-PEIRCE
The Taft-Peirce Manufacturing Company, Woonsocket, R.I.



BELGIUM is bright spot, said Kocher, with "prices and wages in good relationship."

face in France is the apathy of the French worker, Eldridge said. "They just don't pay dues, even though it would cost them no more per month than the price of a single pack of cigarettes or a bottle of wine. That's why only a little more than 2-million workers are paid-up union members. Of course, the total rises sharply at times, but it never gets to the point where major industries are completely unionized as they are now in the United States."

• **Government-Bred**—Eric Kocher, attaché in Brussels, has worked for the government most of the time since he came out of school in 1934, including a stretch in the army. His jobs included work as an economist and social science analyst, and after the war he was in charge of displaced persons camps in Europe. Kocher called Belgium "the bright spot in Europe. There's some unemployment in textiles and elsewhere, but there's also a shortage of workers in mines and metal industries."

"Prices and wages are in good relationship, with real wages up around 5% over prewar levels," he said. A good part of Kocher's work is as a liaison man from the International Confederation of Free Trade Unions, headquartered at Brussels.

• **Lawyer**—Thomas A. Lane, at the embassy in Rome, is a lawyer with a long history of trade union work. He served a long hitch with the AFL Bricklayers as its legislative representative in Washington. During the war he was a lieutenant colonel in military government and headed the labor division in Trieste until 1948. Lane came to Rome as attaché in 1949.

Lane sums up Italy's labor situation this way: "Italy's ills come from 2-mil-



*Fairfax continuous towels used by Brown & Williamson Tobacco Corp. are serviced by Virginia Linen Service, Petersburg, Va.

Brown & Williamson, makers of "Raleigh" Cigarettes, use Cotton Towels* for maximum plant sanitation



Here's How

Linen Supply Works...

You buy nothing . . . your linen supply dealer supplies everything. The low cost includes cabinets, pick-up and delivery, provides automatic supply of freshly laundered towels and uniforms. Quantities can be increased or decreased on short notice. Local service is listed in your classified book under SER-
VILINEN, LINEN SUPPLY
or TOWEL SUPPLY.

• The makers of "Raleigh" Cigarettes believe that cotton towel service is an important phase of their sanitation program. Since they have been using cotton towels, plant washrooms are kept tidier and cleaner, and their employees appreciate the greater comfort of soft, absorbent cotton towels. Raleigh Cigarettes, "the pack with the coupon on the back," are made at the Petersburg, Virginia, plant of Brown & Williamson Tobacco Corporation, where more than 1600 persons are employed.

Whatever your towel problem . . . whether you operate a factory, institution, office or store . . . you can be sure that soft, gentle, absorbent cotton towels will do the best job in promoting employee morale, building customer good will, increasing tidiness in your washrooms and cleanliness among your employees. Cotton towel service is economical, it's efficient and it's a sign of good management.

Clean Cotton Towels...
Sure Sign of Good Management

Fairfax-Towels

A PRODUCT OF WEST POINT MANUFACTURING CO. • WELLINGTON SEARS CO., SELLING AGENTS, 65 WORTH ST., NEW YORK 13

Tighter!



Teeth of SPIN-LOCK Screw touch bearing surface before final tightening.



Final tightening embeds teeth in surface, assuring positive locking.

That's the unique SPIN-LOCK Screw.

Ratchet-like teeth under the head (an exclusive feature) lock into the surface, hold tighter than conventional fasteners under vibration.

Scores of other advantages! It's *one-piece*...no extra parts to add or stock, no special handling, easy to hopper-feed. Neater (fastens flush). Safer (no projections). Easy to drive in hard-to-reach spots. Makes excellent electrical contact.

Hex, pan, truss, flat heads. Write to any of the companies below for complete data on types and specifications.

RUSSELL, BURDSALL & WARD BOLT AND NUT CO., Licensee

Port Chester, N. Y. — Rock Falls, Ill. — Los Angeles 33, Calif.

Spin-lock

**The Tighter, Stronger,
Surer Fastener!**

UNITED STATES

Buffalo Bolt Co.
Div. of Buffalo-Eclipse Corp.
North Tonawanda, N. Y.

Canar Screw & Mfg. Corp.
Rockford, Ill.

Central Screw Co.

Chicago 9, Ill.

Keene, N. H.

Continental Screw Company

New Bedford, Mass.

Great Lakes Screw Corp.

Chicago 27, Ill.

The Lamson & Sessions Co.

Cleveland 2, Ohio

Birmingham 1, Ala.

Chicago 4, Ill.

Scovill Manufacturing Co.

Watervliet Division

Watervliet 48, Conn.

National Lock Company

Rockford, Ill.

CANADA

The Steel Company of Canada, Ltd.

Hamilton, Ontario, CANADA

The Stewell Screw Co., Ltd.

Longueuil, Quebec, CANADA



ITALY'S ills—2-million jobless. "Strong Communist Party doesn't help," said Lane.

lion unemployed combined with an excess of plant capacity. A strong and active Communist Party doesn't help any, but the Communist tide seems to be halted if not pushed back. . . . Besides," Lane says, "Labor's condition has improved a little, but blanket wage increases have cut the traditional spread between skilled and unskilled workers, so that the unskilled are relatively better off."

• **Attache Plus**—Lane's foreign service rating, as well as his experience and connections in Italian labor, put him almost up to the level of adviser to the ambassador rather than an attache. He has been able to assist in picking ports that are free of Communist domination and therefore safe to receive shipments of armament from the U.S.

III. Setting the Pace

The labor attache program is less than 10 years old in the U.S. and not much older in the rest of the world. Britain is generally credited with being the first nation to send out labor attaches. Argentina has an extensive program, and Canada has begun sending them to its embassies.

In countries where there is no full-time attache, an embassy man working at some other job spends part of his time as a labor reporter and liaison man. But many officials feel that full-time men should do the job all over. There are plenty of places, they say, where no American diplomat can get to first base with important labor leaders because of basic racial and cultural differences and a general distrust of the U.S. But a man who can talk labor's language would be on the inside track.

Now for the first time in Network Radio . . .

NBC OFFERS COMPLETE NATIONAL MERCHANDISING



Until now no radio network has ever offered advertisers a thorough, realistic service for merchandising their products on a national scale.

Now NBC takes the lead in offering not only the first national merchandising service in network radio, but the finest, most complete merchandising facilities to be furnished by any advertising medium.

HERE'S WHAT YOU CAN EXPECT:

1. NBC's field experts will train advertisers' sales and distribution personnel in getting dealer support, building displays; make demonstration calls with salesmen on key accounts; make presentations at sales meetings; maintain close liaison with key wholesalers and retail groups in their areas.

2. The NBC Merchandising Plan is approved unanimously by the NBC affiliated stations. Accordingly, the network field experts are working in co-operation with our stations, establishing a chain of merchandising services which should deliver for our advertisers the greatest possible point-of-sale impact.

3. Network on-the-air merchandising programs will be developed which will permit dealer tie-ins for maximum local impact. One series,

"Market Basket," is now in preparation for food store advertisers.

4. Point-of-purchase material especially produced for the needs of retailers will be available to NBC advertisers at cost. This material will be designed to take advantage of network and local station identification.

5. All-important research services will be offered with emphasis on attitude surveys, distribution checks, test stores, consumer panel.

6. Bulletins for mailing to retailers will be prepared and supplied NBC stations on a monthly basis.

This is but a partial list of the services planned by NBC's Merchandising Department. Other activities in the display and national trade fields will be presented at a later date.

WHEN CAN YOU EXPECT THESE SERVICES?

The NBC Merchandising Plan has been in formation since July under the direction of Mr. Fred N. Dodge, formerly Merchandising Director of "The American Weekly." The nation-wide field offices will be functioning by February 15.

Now is the time to plan your participation. The Merchandising Department is available now for consultation on your particular needs.

In the year of hard selling to come, there will be no better sales combination than the NBC Radio Network with NBC Merchandising. *And of all the networks only NBC Radio offers a workable, efficient merchandising service.*

NBC RADIO NETWORK

a service of Radio Corporation of America

PROMOTION

JOS. F. MEYER CO.
Serving Transportation 85 Years
100-82 Franklin Ave. • MINNEAPOLIS 1, TEXAS • P. O. Box 28

JANUARY 1952

1	2	3	4	5		
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

VICTOR CIGARETTES • **CIG. 95¢** • **PACKS**

YOUR NAME HERE
YOUR STREET ADDRESS HERE
YOUR CITY ADDRESS HERE
YOUR PHONE NUMBER HERE

JANUARY 1952

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SYLVANIA ELECTRIC

SINCLAIR

OLIUSALAN H/F
Hofn 10-12
REYKJAVIK

Sted 6439 • **Sted 601**

JANUARY 1952

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GIRLS: They run the gamut from the scantily clad glamor girl, languidly draped around a telephone, to the rosy-cheeked,

wholesome, outdoor type. Counting all varieties, they're still the favorite calendar subject.

IT'S A SMALL WORLD...

WHEN YOU FLY NORTHWEST

SERVICES: Transportation companies often rely on pictures of planes and trains to lure the travel-minded.



The Minneapolis & St. Louis Railway

Railroads stick to passenger trains; they're more glamorous than freight trains.

By now more than 100-million brand-new 1952 calendars have been nailed to the walls of homes and offices throughout the country. Most of them carry advertising messages.

Year by year the calendar is getting more and more popular as an advertising medium. Calendar makers today

Glamor Girl Still Tops



W. W. HOGWOOD & SONS, INC.
HOGWOOD MOTOR PARTS CO.
Phone 100-7-3007, 7-3008
102 Washington Street • HOGWOOD, MASS.

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27	28	29	30	31		

PRODUCTS: More conservative advertisers figure product illustrations will put over their sales message—if not their calendars.



JUST PLAIN ART: There's always the advertiser with a mind of his own. He uses animals, birds, or whatever he happens to like.

do an annual business of \$125-million to \$150-million: most of them, though, make other advertising specialty items as well.

• **Whimsical**—After more than 50 years of trying to discover what advertisers and users want in their calendars, Brown & Bigelow, largest producer, has



SUN	MON	TUE	WED	THU	FRI	SAT	SUN
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17	18	19	20	21	22	23	
24	25	26	27	28	29		

MOSINEE

"More than Paper"

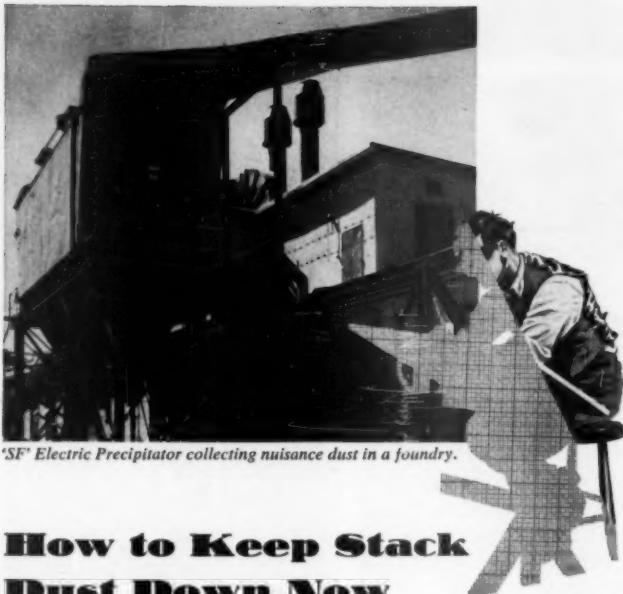


Do you have a processing or fabricating process involving paper? Does your product require some specific characteristic in paper—perhaps unusual strength, dependable uniformity, resistance to heat, moisture or acids?

True, there are thousands of tons of paper available, but MOSINEE—"more than paper"—is produced only in limited quantity to meet the most exacting requirements.

MOSINEE "paperologists" are available to help you.

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Essential Paper Manufacturers



'SF' Electric Precipitator collecting nuisance dust in a foundry.

How to Keep Stack Dust Down Now

The Buell organization of industrial 'dust' men is devoted solely to the design and construction of dust collection and dust recovery equipment that will most efficiently and economically solve your plant's specific Stack Dust problem.

For more than 18 years we have been doing just this for all American industry. Every Buell installation is a custom-designed system, engineered to hold stack dust discharge down to the practical limits which assure new profits, improved product and/or process, better plant-community relations, higher levels of employee morale.

For full details about Buell's **3 basic systems** of dust collection, and how one can be applied to the solution of your stack dust problems, write today. Ask for the new, informative bulletin titled, "The Collection and Recovery of Industrial Dusts." Buell Engineering Company, Dept. 30-A, 70 Pine Street, New York 5, N. Y.



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HIGH EFFICIENCY CYCLONES • ELECTRIC PRECIPITATORS
TYPE 'L' COLLECTORS • LOW DRAFT LOSS COLLECTORS
SPECIAL PURPOSE COLLECTORS • DUST HOPPER VALVES

ENGINEERED EFFICIENCY IN DUST RECOVERY

"... They're much more likely to hang the thing on the wall if it has a nice picture on it . . ."

PROMOTION starts on p. 56

industry, want to look at pictures of pretty girls.

• More conservative companies take to things like landscapes, animals, and Rockwell's Vermont characters.

• But to get a calendar hung on the kitchen wall, you need human interest—pictures with family appeal, preferably combined with recipes, household hints, and a date pad with plenty of space for making shopping lists.

• Nobody, but nobody today wants the old standbys, such as babies, kittens, or the American flag.

• Get Them Hung—Whatever it takes, though, the important thing to the companies that send out calendars is that they get hung. And even though a calendar has a certain utility appeal, it isn't enough to make people want to look at it day after day. They're much more likely to hang the thing on the wall if it has a nice picture on it.

Even though the date pad takes second place, it can't be subordinated to the point where it loses its usefulness. It has to be reasonably legible. For instance, a business calendar, says B&B, should be easily read by the clerk sitting 15 ft. away.

• What and Where—In planning a calendar for an individual client, the calendar maker first decides what it's supposed to do, then where it's going to hang. It makes a difference whether it's destined for a stark wall in a public place, a wall where the same people will see it every day, an executive's office where important buying decisions will be made, or a kitchen.



All these factors must be weighed one by one with major clients. The average small businessman (the most enthusiastic calendar buyer) usually settles for stock pictures, with imprints of his company's advertising. But bigger companies with more money to spend generally prefer individually designed illustrations. This often calls for the services of established artists, such as top girl-artists Gillette Elvgren or Rolf Armstrong, landscape expert Maxfield Parrish, or human-interest specialist Norman Rockwell.

• Want Their Own—Even though it runs into a lot of money, more and more large companies are demanding these custom-built, tailored-to-measure calendars. In fact, says R. J. Henderson, vice-president of the special sales division of Brown & Bigelow, the company has had to expand its facilities for creating specials every year—even though



Neatest steel trick of the year

... turning a high strength steel cup inside out, cold



Offhand, anyone familiar with high strength steels would say it couldn't be done. But one of our customers, the Scaife Company of Oakmont (Pittsburgh District) Pa., does it every day.

Employing a unique reverse-drawing method and using a U·S·S High Strength Steel especially adapted for this process they turn out cylindrical containers of various kinds that are not only stronger than those made from carbon steel but weigh substantially less.

To accomplish this, the steel has to meet two entirely opposite requirements. It has to be so strong that it can be used in thinner gages to reduce weight, and yet must have enough ductility to satisfy the drastic fabrication method that would be considered severe even for carbon steel.

Scaife was the first to use this method to draw cups for large, low-pressure cylinders. These cups, 14½ in. in diameter and 24½ in. deep, are drawn cold, from

12-gage steel blanks in one continuous stroke in a reverse draw press. The diagrams at left show how it is done.

Starting with a 38 in. diameter steel blank (Fig. 1) the press first draws the steel into a shallow cup (Fig. 2). As the stroke continues, the cup is literally turned inside out (Fig. 3) to form the finished cup (Fig. 4) which has very uniform wall thickness. Two of these cups are then welded together to make a cylinder.

Made with high strength steel, cylinders weigh about 20 lbs. less. The maker gets 26% more cylinders from each ton of steel used. Lighter weight makes cylinders easier to handle, and also pays off in lower freight costs—both on the steel from our mills and on cylinders shipped. (A customer 500 miles away saves as much as \$100 per carload.)

No matter what your product or your fabricating procedure, United States Steel can supply you with the right steel to fit your needs. Our metallurgists, with their tremendous background of practical experience, are ready at all times to work with you on any problem that involves the more efficient use of steel. Simply write United States Steel, Room 4342, 525 William Penn Place, Pittsburgh 30, Pa.

UNITED STATES STEEL

Big Advantages Now! Tremendous Advantages Later!

**Locate that new plant
in the area
"Closest to America"**



FORD AUTOMATIC TRANSMISSION DIVISION COMPLETED IN 1951

**Let us give you a comprehensive study of the Cincinnati area... and
the strategic advantages it can provide in the competitive period ahead**

There are plenty of "right now" reasons, of course, for locating plants with rush defense assignments in the inland Cincinnati area.

But you can be sure that such manufacturers as General Electric, Ford and many others who have recently built plants here were thinking of tomorrow as well as today. Just as you are.

For on the other side of the defense hump, a competitive battle is looming that will call for every strategic advantage a company can command.

One of them is location. Central location. And your shipping platforms in the Cincinnati area are within 400 miles of 40% of the nation's pocket-

books. And you're right *next door* to coal and steel — with the Ohio River at your doorstep to help get heavyweight cargoes in and out at low cost. Major trunk rail lines? Eight of them. And over 100 interstate truck lines. Power supply? Plentiful.

But one of the most important advantages is the wholesome *American* atmosphere you find here. People still take pride in doing a good day's work. They're solid citizens. They think straight. They have a sense of community responsibility that is reflected in an unusual record of industrial harmony. Add it all up—doesn't the area "Closest to America" have what you're going to need?

Would you like answers to your own specific questions in a thorough and confidential report? Just write or phone The Industrial Development Department, The Cincinnati Gas & Electric Company, Cincinnati, Ohio.

The CINCINNATI GAS & ELECTRIC Company
The Union Light, Heat and Power Company

Serving homes and industry in the Greater Cincinnati Industrial Area with an adequate and dependable supply of gas and electricity

CINCINNATI
the city closest to America



"... Some advertisers have very definite ideas of their own . . ."

PROMOTION starts on p. 56

he admits the stock calendars are, and always will be, the backbone of the business.

"Naturally," Henderson explains, "the advertiser who distributes 10,000 or more calendars feels he should have a subject exclusively his own, rather than one that may be duplicated by small advertisers. It's a matter of pride and prestige."

• **Minds of Their Own**—Some advertisers have very definite ideas of their own as to what they want on their calendars.

• One jobber, for instance, is known among his customers as a hunter with a string of bloodied dogs. One of his hunting dogs each year puts in overtime posing as the subject for the jobber's calendar.

• Nash Motors squeezes extra dividends out of outdoor billboard paintings by having them reproduced in full color on a small, 12-sheet home calendar.

• A bank prides itself on some original paintings hanging in its lobby, reproduces these in color.

• A manufacturer of industrial trucks got the idea of putting a glamor girl in the driver's seat. Now customers are beating the bushes for copies of his annual calendar.

Railroads figure passenger trains are more glamorous calendar subjects, even though the lines get a bigger chunk of revenue from freight. One road, though, gives credit where credit is due: Minneapolis & St. Louis Ry. shows a freight train against a small-town background on its 1952 calendar, with a grain elevator looming large, as it does in contributing to the road's traffic.

• **Has a Purpose**—Wherever the advertiser's taste in art takes him, every calendar has to fulfill three basic requirements to be a success as an advertising medium. It has to get the company name across (the best way to do this is to keep it in the background), make the gazer want to buy a particular brand of product, and help get new and repeat business.

• **Go Big Abroad**—That applies to the foreign trade, too. Many American export departments consider the distribution of calendars in foreign countries a must.

The reason is that outside the U.S., especially in South and Central America, advertising publications are fewer and further between. So the calendar trade carries an even heavier advertising load there.

TURNING IDEA-PLASTICS INTO DOLLARS



Cams of Du Pont nylon ring the bell with longer wear...fewer machining operations

The revolving cams of Du Pont nylon plastic, in the telephone "interrupter" you see here, regulate the timing of busy signals and coded rings for your telephones. They do this by pressing against, then releasing, a nylon insert on a spring, which, in turn, closes and opens an electrical circuit. The nylon parts replace an intricate metal assembly, providing the manufacturer with "interrupters" that perform more accurately, last longer.

The nylon cams, supplied by the molder in the form of blanks, are easily machined in two operations to meet signal requirements of individual exchanges. This greatly simplifies the manufacturing job, since the former parts involved about 40 machining operations.

Smooth performance of nylon gives more accurate control of timing pulses,

and accelerated tests indicate the nylon parts will far outlast former assemblies.

In this, and many other uses, parts molded or machined of Du Pont nylon run quietly with little or no lubrication needed. Nylon is light...resilient...resists abrasion, moisture and most chemicals...maintains its form and strength at high temperatures. In addition, it can be molded in thin sections and around delicate inserts.

Nylon is only one example of the versatility of more than 100 plastics and chemicals offered industry by the Du Pont Polychemicals Department. Which plastics or chemicals offer you the greatest opportunities? We will gladly send you a booklet containing bulletins on the Polychemicals products used in your industry. Each bulletin gives information on

uses and possible applications, specifications, packaging, bibliography and technical data. For your copy, please write on your business letterhead.

E. I. du Pont de Nemours & Co. (Inc.)
Polychemicals Department
1318 Nemours Building, Wilmington 98, Delaware



Polychemicals
DEPARTMENT
PLASTICS • CHEMICALS

PRODUCTION

The Layman's Guide to Gee-Whiz Auto Engines

When engineers
say this...

... They mean
this...

... Which does
this

High Compression Ratio	Squeeze fuel-air mixture into smaller space between piston and cylinder head before the explosion.	Burns the fuel more efficiently so that you get more miles per gallon.
Fuel Injection	Shooting fuel directly into the cylinder without passing it through a carburetor.	Allows the engine to burn less sensitive fuels and delivers more miles per gallon.
Dual Fuel	Using either two gasolines (one with a high octane rating and one with a normal octane rating) or injecting a water-alcohol-tetraethyl-lead mixture.	Lets the engine get along with lower octane gasoline all or most of the time.
Cool Hot Spots	Lowering temperature of parts like exhaust valves.	Lets high compression ratio engines get along on lower octane rating gasolines.

Detroit Can Do Its Own Hot-Rodding

The industry knows how to design souped-up engines and gas-savers. But they cost too much for today's car.

When it comes to building hot-rod engines, Detroit knows how to do it, and the engineers get as much kick out of it as the backyard tinkerer does. If cost were no consideration, Detroit could put souped-up engines on the road that would make the most flaming youth say, "Gee whiz!"

Chrysler's "gee-whiz" engine for the custom-built K310 car (BW-Nov. 24 '51, p.21) is one example. James C. Zeder, Chrysler vice-president and director of engineering and research, told this month how the standard 180-hp. horsepower engine was changed to 310-hp.

The engineers did it without such tricks as supercharging—they built "mechanical octanes" into the engine so it delivers more power on commercially available gasoline. The big change: to increase the engine's ability to gulp more fuel-air mixture. That was done by enlarging valves and ports, by providing four single carburetors instead of one dual carburetor.

• **Double Goal**—Instead of the hot-rodder's goal of more power at any cost,

Detroit looks for two things: (1) more power from the same-sized engine, and (2) more miles per gallon.

Actually, the driver rarely uses all the horsepower his engine packs. In a car like the Chrysler or the Cadillac, the engine doesn't deliver its maximum horsepower at less than 90 mph. But the reserve power does come in handy for fast getaway, passing, and hill-climbing.

Detroit is pretty well agreed that the way to get added power is to build engines with higher compression ratios. That in itself wouldn't be too tough a chore.

But engines have to burn gasoline, and that's where they run smack into the gasoline quality called octane rating. The auto industry, therefore, can't run ahead of the oil industry in its developments.

• **Octane Gremlins**—Octane number refers to the fuel's degree of knock resistance. The higher the number, the less knocking. Refiners build up the octane rating of gasolines by adding

tetraethyl lead or petroleum constituents they get from refining and cracking processes. Today gasolines have reached the point where adding an octane number to fuels may involve millions of dollars' worth of special refining equipment.

Most of the knock gremlins are born when fuel is burned inefficiently in the engine. If the fuel mixture burns evenly, not all at once, the piston gets a firm, steady push. If it burns in a flash or before the piston is ready for the push, there's a protesting "ping" or knock in the engine. It's like trying to move a heavy object by punching it suddenly instead of giving it a hard shove with your shoulder.

• **High Compression**—Higher-compression engines squeeze the charge of fuel and air into a smaller space before burning it; thus, they deliver more power from a given quantity of fuel. But higher-compression engines are more sensitive to knock. That means they need higher-octane gasolines. It's what the industry calls the chemical octane number route to more power and more mileage—putting antiknock stuff into the gasoline.

The engineer's ally in getting higher-



Greater Productivity

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LUCAS HORIZONTAL BORING DRILLING AND MILLING MACHINES

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THE NEW BRITAIN MACHINE COMPANY
NEW BRITAIN, CONNECTICUT



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quitting early

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You can put the "BITE" on time losses. A Stromberg time system keeps every department on a uniform schedule automatically. It is guarded three ways against failure at any time. Important facts about Stromberg are given in the folder "for every working minute." Write for your copy now.



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TIME RECORDERS • TIME STAMPS • JOB RECORDERS • CLOCK SYSTEMS



octane gasoline on the market is one you might not suspect. It's the old car already on the road. As an engine gets older, it gathers carbon deposits that make the engine more sensitive to knock. After 10,000 to 15,000 miles of service, an engine needs a gasoline octane rating 10 or 15 numbers higher than it did at the start.

So this is what happens: Designers put a little higher compression into engines year by year; these engines soon begin to need higher octanes; to satisfy cars on the road, refiners have to keep boosting octane quality; then the auto maker raises the compression ratio of his new engines to keep up with the antiknock resistance of available fuels.

• **Mechanical Octane Route**—The other approach to antiknock efficiency is to design engines that are less susceptible to knocking. That's the way both Detroit and the inventors of radical engines are moving. In recent years a number of radical designs have emerged, all aimed at lowering the engine's octane appetite or getting more work from the fuel burned.

• **Fuel Injection**—In the summer of 1950 the Texaco Co. announced an engine that combined features of the gasoline and diesel engines. It's an engine that injects fuel directly into the cylinder, as in the diesel, instead of mixing it first with the air in a carburetor, as in the gasoline engine. It isn't finicky about fuel octane number. It gets along even on kerosene, and it's not knock-sensitive. By burning lean fuel-air mixtures, the Texaco job gives 30% more miles per gallon than present-day engines.

If it's such a hot engine, why didn't Detroit latch onto it? "It just costs too much to make, even if it's as good as Texaco says it is," answered one auto engineer. "The injection equipment alone might cost as much as the engine, as diesel users well know."

• **Low-Cost Injection**—A variation on this approach has been developed by Neil O. Broderson, president of the Rochester Button Co., in Rochester, N. Y. This executive has tinkered with autos ever since he was old enough to handle a monkey wrench. He says his design will take low-cost injection equipment because the fuel is shot into a low-pressure area in the cylinder. His engine runs about 26% more efficiently than one with a carburetor.

As in the Texaco combustion process, Broderson's engine gets its efficiency by stratifying the charge. That means a pretty rich mixture, about the size of a golf ball, is exposed to the spark from the spark plug. The rich mixture is surrounded by a much larger sphere of pure air around it. So the fuel burns efficiently.

• **Catalyst**—Another approach to lower octane needs in engines was announced

GLASS helps dry printing machines speed office work

Can glass improve your product, too?

Dry print reproduction machines, like the one illustrated, are saving copying time in thousands of offices and plants.

Their fast, accurate operation depends on a PYREX brand glass cylinder which exposes your original copy—letters, forms, or drawings—to the ultraviolet rays of a high pressure mercury vapor lamp. The lamp, inside the cylinder, transfers the exact image of your original copy to a sensitized sheet, making permanent reproduction in a matter of seconds.

A Corning glass solved the design problem of the revolving cylinder because, *first*, it can be blown to close dimensional tolerances; *second*, it possesses high light transmission qualities; *third*, its hard, smooth surface provides a wear resisting contact with the copy. And, this particular glass has high heat resistance, great corrosion resistance.

This is only one of thousands of uses Corning has helped manufacturers find for PYREX brand glass No. 7740. And PYREX brand glass No. 7740 is



Detail showing PYREX brand glass cylinder in Ozalid's Ozamatic dry printing machine. Original copy and sensitized sheet feed around cylinder together for exposure to rays of high pressure mercury vapor lamp.

only one of thousands of glasses Corning research has developed to match specific product design requirements.

Are you up to date on the facts about glass as a modern design and engineering material? Perhaps it can improve your product or replace some material that's in short supply. We'll welcome a chance to discuss your problem. But send today for a copy of "GLASS—its increasing importance in product design."

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Please send me your 12-page illustrated booklet, "Glass, Its Increasing Importance in Product Design."

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GENERAL FOODS FINDS Extra Profit Opportunities IN A MOA* LOCATION

Better distribution...availability of raw materials...supply of skilled workers—General Foods Corporation sought, and has found—all these advantages in its Metropolitan Oakland Area branch plant. Mr. J. K. Evans, General Manager of the Maxwell House Division, says:



Mr. J. K. EVANS
General Mgr.

"AFTER careful consideration, we selected San Leandro as the ideal site for our newest Maxwell House coffee plant. We felt the location was excellent for receipt of important raw materials.

There was a fine group of workers to draw from. It was an advantageous point for distribution of our finished products throughout the

entire Western area, with good facilities for shipment by rail or truck.

"Early in 1950 our plant opened. Operation now proves the presence of all the factors that led us to choose this location. They combine with the fine cooperation of business men and Chambers of Commerce to make ours an efficient operation in an ideal community environment."

Savings in shipping time and costs, skilled labor supply, larger share of the nation's fastest-growing market, ideal working climate—no matter which combination of these profit-making factors you demand, you'll find it in a Metropolitan Oakland Area location. Investigate today.

*MOA stands for **Metropolitan Oakland Area**—includes all of Alameda County, California. Industries locating here can take full advantage of incentives and benefits offered by the Federal Government to plants in locations meeting specifications of the National Industrial Dispersion Program. Write for particulars.



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OAKLAND • PIEDMONT • PLEASANTON • SAN LEANDRO • RURAL ALAMEDA COUNTY

last week by Associated Research & Development Corp. in New York. The brainchild of Dr. Sophia Berkman, this method aims at keeping down carbon deposits, which cause knock. Dr. Berkman has come up with a synthetic material in the compression chamber that behaves like a catalyst; it promotes complete combustion, yet doesn't enter into the burning process. The material could be cast into the engine cylinder and would last indefinitely. Cost of this catalytic material for an auto engine should run under \$1 per car. Detroit hasn't had a chance to appraise the idea yet.

• **Dual Fuel**—Several years ago two groups converged on the octane needs of engines in slightly different ways, but by the same reasoning. One was Thompson Products, Inc., with its Vitameter device; the other was Socony-Vacuum, with its dual fuel system. Their developments stemmed from this curious fact of engine operation:

An engine needs a lot of octane only a small part of the time—when it's working hard, such as in hill-climbing, accelerating, or at starting from standstill. At other times it can get along on low-octane stuff. In fact, tests show that for normal cruising, modern auto engines can get along on heptane, which is a zero octane gasoline. Why not feed the engine ordinary gasoline for normal driving and give it a shot of high-octane stuff only when it's needed? That's how Thompson and Socony engineers reasoned.

They did it in two different ways. Thompson developed a special anti-knock "bugjuice" consisting of alcohol, tetraethyl lead, and water. The liquid is fed through a special gadget hooked up to the carburetor. Socony actually built a dual fuel system, with a special carburetor and a two-compartment gasoline tank for both low-octane and high-octane fuels.

• **Variable Chamber**—Taking off from the same kind of logic that sparked the last two ideas, I. B. Humphreys, a wealthy Denver miner and inventor, came up with a new concept in engine design. Said Humphreys, if the engine is not octane-hungry most of the time, why not build a higher compression ratio into it during those periods when it isn't octane sensitive? That would make the engine give more miles per gallon from the same gasoline.

He did it by building a variable compression ratio engine that makes the most of the gasoline. Instead of having a fixed cylinder head, his design sports a movable cylinder "ceiling" that can be adjusted to change the size of the compression chamber. Of course, it takes lots of added parts to get this unusual result.

• **The Cost**—Detroit admits that these and other innovations may improve the

performance of an engine—but at a price. And that price usually is a more costly engine. Auto makers point out that the engine is only one part where they can add dollars to the cost of a car; for marketing reasons, it may be more worth-while to add cost in the chassis, the suspension, or the upholstery. Many of the Rube Goldberg engine ideas offer substantial gains, but add too many dollars to the price of the engine.

Radical engines aren't new to Detroit. Auto makers keep large research staffs busy designing, building, and testing radical powerplants that bear no resemblance to those under the hoods of late models. New ideas do get into production engines, but it has to be an evolutionary rather than a revolutionary process. There are two big reasons:

- It takes years to make sure that a new idea will give the same results in the hands of the customer as in the laboratory and on the proving ground.
- Investment in special production machinery and equipment is too high to make frequent changes.

A brand-new engine takes at least 10 years from conception to production, according to V. G. Raviolo, assistant to the chief engineer of Ford Motor Co. He breaks the time down this way: five years for development, two years for pilot line production, one year for redesign, and two years for tooling up for actual production.

Huge Investment—Today the tooling for a high-volume production engine runs from \$50-million to \$100-million. And it's all single-purpose machinery. A transfer machine that may perform 80-odd operations on a cylinder block may cost several hundred thousand dollars, but it can be used for only one engine design.

This high capital investment can't be written off on one year's production, but over 10 to 15 years. Such high equipment costs dictate Detroit's design approach of little by little.

When a new engine is built today, its basic design is conceived for the company's 1962 cars. For example, its compression ratio today may be 7.5 to 1, but the engine in 1962 may be visualized as a 12 to 1 compression ratio. So the engine bearings and crankshaft are built sturdily enough to withstand the pressures of the 1962 engine.

Each year the cylinders are bored a little more to give more power, and the cylinder head is shaved down a little less to increase the compression ratio. But basically, the engine block casting and components are the same.

This way, the salesmen have something better to sell each year, the basic tooling lives for its allotted span, and engine development stays in line with fuel development.



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Metal Sash, Roofs, Buildings,
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IN THE HEART OF THE NEW YORK METROPOLITAN AREA

Rolling Stock Rolls More Smoothly

Chrysler research is taking a lot of the jounce out of freight cars, cutting down on damage to shipments.

Back in the thirties Walter P. Chrysler took a trip in a railroad president's private car. His criticism of the jouncing ride resulted in a redesigned railroad truck that eliminates a lot of the vibration and cuts damage to freight.

"Here we are," Chrysler said to his host, "riding in a heavy car on rails, and we should be enjoying a smooth ride. But look how this car is vibrating and bouncing. Why, I can give you a better ride on a country road in one of my automobiles."

"If you think you can improve on this ride," the railroad executive snorted, "go ahead and try!"

• **The Challenge**—Chrysler, a former railroader himself, took on the challenge. He and Carl Breer, who is now a research consultant for Chrysler Corp., began studying ways to reduce the shocks and vibrations of rail travel. After Chrysler died, Robert N. Janeway carried on the developmental work, is now in charge of dynamics research in

Chrysler Corp.'s engineering division.

• **Crucial Year**—Their years of study, in collaboration with several railroads, finally produced a railroad truck in 1948 that's designed for high-speed freight service. But, Chrysler feels, 1952 will be the payoff year for the truck, the chance to prove itself.

You can't find a load of freight that's more touchy than ammunition. And that's just the job to which the Chrysler trucks have been assigned. They will soon go into service on a lot of ammunition cars that have been ordered for the Navy by the U.S. Army Transportation Corps. Chrysler has licensed the Symington Gould Corp., Depew, N. Y., to make the trucks for the Navy contract.

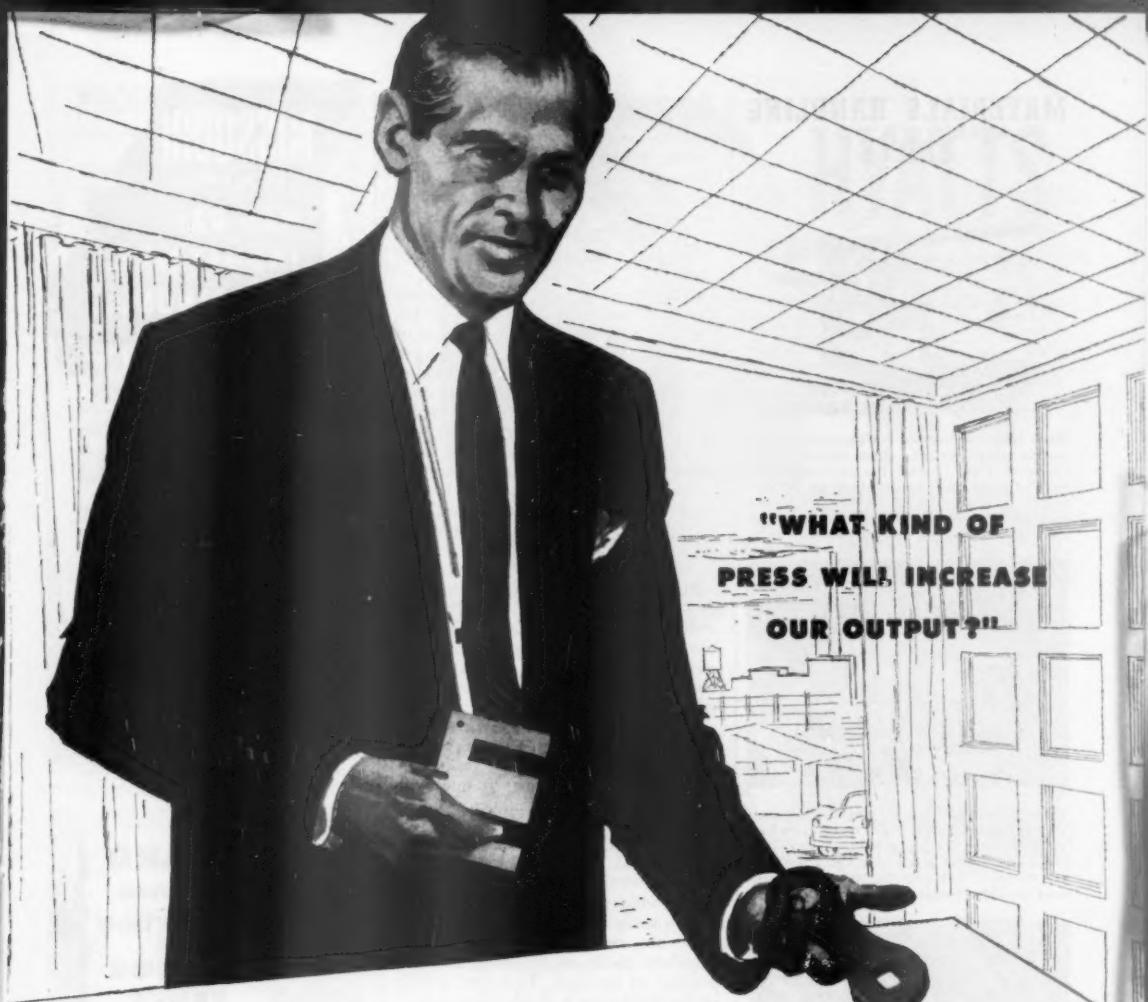
When train speeds exceed 55 mph. or 60 mph., conventional car trucks are almost certain to vibrate and go out of alignment, causing still more vibration. The vibration actually consists of vertical and lateral shocks. In combination



Cranes Pinch-Hit for Missing Railroad

Necessity drove Cincinnati Gas & Electric Co. to build its Clermont power station far from transportation facilities. How to get heavy machinery to the site? CGE found that by using two giant cranes it could avoid building a railroad spur and save a lot of money. The heavy gear is hauled to a river-edge railhead below Cin-

cinnati; one of the cranes hoists it into barges. Then it's towed 40 miles upstream past the city to the plant site, where the second crane unloads it. The two cranes are the heaviest now being used on U.S. rivers. When the station installation is finished, they'll still have a job: maintenance and future expansions.



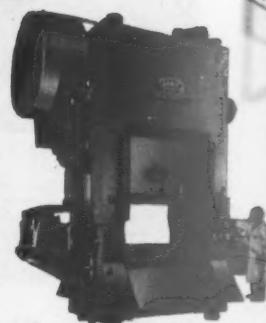
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Danly helps management solve today's production problems

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Danly Autofeed Presses like the one shown at right have tripled production where faster cycling was required. Other Danly Presses are designed to meet practically every possible production need. Call a Danly press engineer today . . . let him help solve your particular stamping problem.

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IT COSTS LESS TO RUN A DANLY PRESS!

MATERIALS HANDLING BRIEFS



Dock time on barges is expensive . . . so power plant unloads them quickly with Wellman Coal Tower. Bucket scoops up 600 tons of coal an hour, feeds it into hopper. Then conveyor carries it to stockpile. Speed of dependable Wellman equipment cuts handling costs to minimum.



4½ ton load accelerates from a dead stop to full speed in just 12 seconds when lifted by this Wellman Mine Hoist. Full load zips up the mine shaft at 1500 feet per minute. Wellman hoists move materials quickly, boost productivity.



Big bites of iron ore don't loosen the jaws of this Wellman Williams-type bucket. Welding of buckets was pioneered by Wellman to make them rugged and durable. Whether the need is for machinery to handle heavy bulk materials, or specialized steel mill equipment, Wellman will build it . . . better. The Wellman Engineering Company, 7000 Central Avenue, Cleveland 4, Ohio.

Wellman will build it!

WELLMAN
ENGINEERING COMPANY-CLEVELAND

they can damage a shipment of cargo and wear down a freight car body over a period of time.

The Problem—When Chrysler and his engineers went to work on their project, vertical shocks had been partly overcome by earlier improvements on truck design. But not much had been done designwise to absorb the lateral shocks.

The group figured that it would have to control each type of shock before it could lick the combination of the two. It did that by designing a shock absorber within a shock absorber for the truck. The car body rests on a set of springs that absorbs the vertical jolts. And the springs, in turn, are mounted on swings that move sideways to take up the lateral shocks.

In absorbing the shock, each part works independently of the other, but together they kill most of the shock before it reaches the car body.

The vertical shocks are mostly cushioned by standard coil springs, the type used on conventional trucks. But the coil springs have one fault: They develop sympathetic vibrations of their own when traveling at certain speeds over poor, rough roadbeds. This peculiarity alone can damage freight as much as the roadbed shocks.

• Chrysler's Solution—Chrysler eliminated this rhythmic bounce by installing other kinds of springs as snubbers. Friction devices in the snubbers dampen the bounce set up by the coil springs.

The swings, on which the coil springs are mounted, simply move sideways to take care of lateral vibrations. But too much swing, or free sway, is prevented by a sliding friction that is produced when the swing moves. The shock-absorbing ability of the swing is independent of the load. That way, a full-loaded freight car is protected as well as a lightly loaded one.

The Chrysler-designed truck floated over the rails compared to a conventional truck when the auto maker tested it on performance tests. At different shock intensities it reduced the jolts from 85% to 100% for vertical and lateral rides.

• Standard Equipment—The Chrysler model is interchangeable with trucks that have been built to the standards of the Assn. of American Railroads. They use some standard AAR parts, such as coil springs, journal boxes, and brake rigging. And the wheels can be changed quickly without disturbing the shock-absorbing assembly.

General American-Evans Co. has made the Chrysler truck standard equipment on its Damage Free box car (BW—Nov. 18 '51, p.60). No hard and fast figures are yet available on the reduction of damage and wear. But one official of General American says damage claims have been "practically negligible."

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ANCOR CHAIN LINK FENCE gives you day and night protection against trespassers, snoopers, agitators and troublemakers of every kind. Makes outdoor storage safe. Helps control traffic in and out of your plant. Write today for our illustrated catalog, describing exclusive features like Deep-Driven Anchors that hold fence erect and in line, Square-Form Terminal Posts for extra strength, Square Frame Gates that resist warping and sagging. Address: ANCHOR POST PRODUCTS, INC., 6675 Eastern Ave., Baltimore 24, Maryland.

Anchor Fence

NATION wide Sales and Erecting Service

PRODUCTION BRIEFS

Sewer gas from an adjoining sewage disposal plant heats the municipal garage of the city of Austin, Minn. The heating system uses a stainless steel combustion chamber, designed by Dravo Corp., Pittsburgh, to prevent rapid corrosion from the sulfuric acid in the gas.

To test turboprop engines on transports, the Navy has picked Pratt & Whitney Aircraft's T34 Turbo Wasps. They'll be installed on two of Lockheed's Super Constellations. The Navy picked the Connie because it will need a minimum amount of modification to take the new type of powerplant.

The atomic reactor at Brookhaven National Laboratory had a big commercial market in 1951: It supplied 270 radio isotopes for shipment to 26 civilian customers. Hospitals and universities bought most of the isotopes (BW-Nov. 17 '51, p130), some for experiments in physiology.

Research in coal, aimed at making by-product synthetic fuels, is the job of a newly formed section of Koppers Co., Inc.'s research department. Its head will be Dr. E. E. Donath, a leader in Germany's wartime development of ersatz liquid fuels.

More high-octane gasoline is in the offing through Socony-Vacuum's \$27-million expansion. The project is based on S-V's latest reforming process, which upgrades low-quality fuel by small additions of tetrachyl lead. The company will put up catalytic crackers at refineries in California, Texas, Kansas, and New Jersey. The total daily capacity: over 1.5-million gal.

An electronic brain called Ordvac, under construction at the University of Illinois since 1949, has passed its final exams. It will go to the Army Ordnance's Aberdeen Proving Ground to work problems in ballistics research. A twin machine is being built for use on the university's campus.

A steam-heated pipeline 152 mi. long has gone into operation for Gulf Refining Co. between southern Mississippi fields and Mobile. The heat makes the heavy, gummy crude oil of the Mississippi fields flow easier.

Refined lithium chemicals are the products of a new plant of American Potash & Chemical Corp. The Trona (Calif.) plant recovers crude lithium salts, the raw materials, from the brine of nearby Seales Lake.



HYATTS CUT COSTS in the textile field

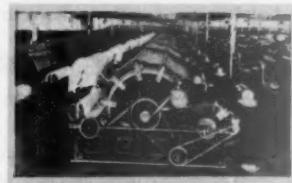
Modern, Hyatt-equipped textile machinery is producing more and better cloth at less cost.

Because, with Hyatt Roller Bearings built in, faster operation is assured, power costs reduced and only infrequent lubrication required.

And another decided advantage of Hyatt-equipped looms and preparatory and finishing machinery is the cleaner yarn and cloth produced, because there is no leakage of grease or oil from these bearings.

In textile machinery, Hyatt Roller Bearings are standard equipment or may be had upon specification.

Likewise in all branches of industry, agriculture and transportation Hyatts are preferred because they are built to serve and to last. Hyatt Bearings Division, General Motors Corporation, Harrison, New Jersey.



HYATT ROLLER BEARINGS



"Too brave to die..."



Sam Davis, the Nathan Hale of the Confederacy, was just 21. An exceptionally able soldier, he had been selected to act as a courier to bring vital information from spy in the Union Camp to Confederate headquarters. With the papers secreted in his boot and under his saddle, he was making his way back through the lines when he was stopped and searched.

Though repeatedly offered his freedom if he would reveal the source of his information, Sam Davis refused. "If I had a thousand lives, I would lose them all before I would betray my friends."

As was said by the Union general who reluctantly gave the order for his execution, "He was too brave to die."

From Sam Davis' South comes the cotton fibre which is an important element in the superior strength, long life, and handsome appearance of Gilbert Papers. It accounts in part, too, for the superb erasability of these papers. And in Gilbert Papers, only the virgin strength of *new* cotton fibres are used.

Not all "bond" papers contain cotton fibre, but you can be sure of this important advantage in the papers you use by specifying a Gilbert Quality Paper.

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NEW PRODUCTS



No-Bump Bumper

The latest thing in accessories for your car is bumpers to take the bump out of bumping. Called Hush Bumpers, they are inflated guards that replace standard metal guards on your chromium bumpers.

Hush Bumpers are made out of polyvinyl-chloride, better known as plastisol, a resilient, nonrubber material resistant to most kinds of wear and abrasion. They also contain about $\frac{1}{2}$ lb. of steel, a saving over the usual guard, which uses 3 lb. They come in all colors of the rainbow to match your car or in chrome-color to match the bumper.

• Source: Hush Bumpers, Inc., 2332 Logan Blvd., Chicago, Ill.

• Price: \$7.50 to \$9.00.

Will Copy Anything

The field of copying machines has another entry—one that's cheaper and smaller than most. It's the Auto-Stat from American Photocopy Equipment. Auto-Stat will photocopy any written, drawn, printed, or photographed material almost instantly. What's more, it's a dry process.

Briefly, this is how it works: First, the original to be copied is inserted with a light-sensitive paper into a contact printer. Then the light-sensitive paper is put into a processing unit with another sheet, not sensitive to light. Eight seconds later, the sheets come out of the machine "glued" together. Just peel them apart and you have a positive reproduction of the original on the second sheet. The machine, which can turn out 100 Auto-Stat copies per hour, is small enough to sit on top of a desk.

• Source: American Photocopy Equipment Co., 2849 N. Clark St., Chicago, Ill.

• Price: Under \$200.

Prevent conversion slow-down with J-M Movable Walls



Johns-Manville Asbestos Universal Movable Walls are readily available. Made of noncritical materials, they give you complete freedom in planning or rearranging space

● Reallocation of existing space and partitioning of new space can be done easily and quickly with Johns-Manville Universal Movable Walls. Made of asbestos, these walls are ideally designed to help business and industry meet the space problems involved in the defense effort.

The flush panels have a clean, smooth surface that's hard to mar, easy to maintain, and are extra strong to withstand shock and abuse. They're light in weight, easy to erect and relocate. The "dry wall" method of erection assures little or no interruption to regular routine.

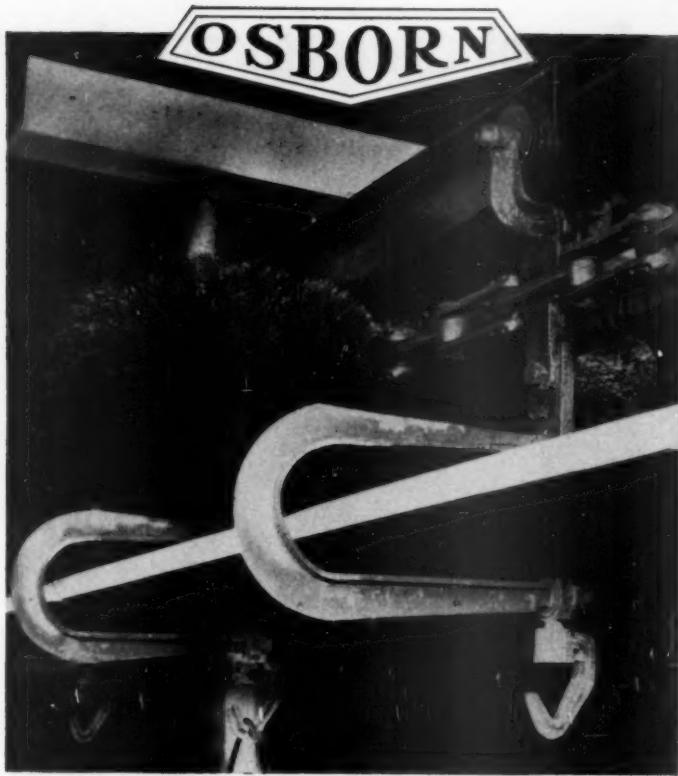
Johns-Manville Walls may be used as ceiling-high or free-standing partitions. The complete wall, including doors, glazing and hardware, is installed by Johns-Manville's own construction men under the supervision of trained J-M engineers—responsibility is undivided.

An estimate will convince you that the cost of J-M Movable Walls compares favorably with other types of wall construction. For full details, write Johns-Manville, Dept. BW, Box 158, New York 16, N. Y. In Canada, write 199 Bay Street, Toronto 1, Ontario.

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PRODUCTS

ASBESTOS Movable Walls

INSTALLED NATIONALLY BY JOHNS-MANVILLE



End of the line for costly down-time

This brushing idea can help you boost your output two ways: (1) It keeps the conveyor line moving. (2) It enables you to use maintenance manpower for more productive work.

This conveyor chain had to be dismantled and cleaned periodically to remove dirt and scale. Then, with the help of the Osborn Brushing Analyst, the costly downtime for repairs was eliminated as shown above. An Osborn Disc-Center* Wire Wheel Brush, mounted on each side of the chain, revolves with the chain and removes all scale and dirt continuously.

This is just one of thousands of ways that plants are stepping up production with power brushing. Have your Osborn Brushing Analyst discover new brushing ideas for your cleaning and finishing operations. Call today or write *The Osborn Manufacturing Company, Dept. 607, 5401 Hamilton Avenue, Cleveland 14, Ohio.*

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Osborn Brushes

OSSORN POWER, MAINTENANCE AND PAINT BRUSHES AND FOUNDRY MOLDING MACHINES

Man's Loudest Noise

The louder a siren gets, the more irritating it is—but when it comes to air raids, the louder the better. Now the Marine & Industrial Division of Chrysler Corp. has come up with what it says is the loudest siren of all.

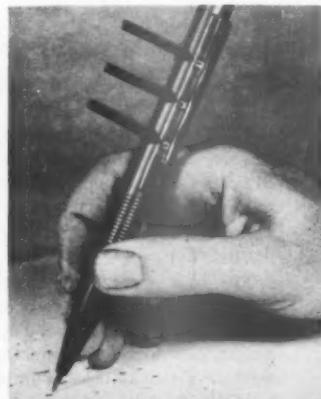
The siren is powered by Chrysler's Industrial V-8 180-hp. engine. A three-stage compressor drives air through a set of six giant horns at speeds greater than 400 mph. The resulting sound, rated at 173 decibels, is the loudest mechanically contrived noise ever devised by man for sustained output, claims Chrysler. As the siren revolves on its base, it's loud enough to be heard in a circular area with a 16-mile diameter under ideal weather conditions.

- Source: Marine & Industrial Engine Div., Chrysler Corp., Detroit, Mich.
- Price: Approx. \$5,500.

NEW PRODUCTS BRIEFS

A tiny thermostat made by Thomas Edison, Inc., W. Orange, N. J., is smaller than a paper clip. It has a temperature range from -50°F to 350°F, should be good for heat control in crystal ovens, hot plates, heating pads.

A Sealer-Coater that dries completely in two hours comes from du Pont. It dries so quickly you can start painting on the second coat as soon as you finish the first.



Totes Up for You

Count 'em off as you mark 'em off. You can count blood cells, mark and count photons or plans, etc., with Mast Development Co.'s (Davenport, Iowa) register. Each tap with the pointer racks up a number (arrows).



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sends figure output soaring
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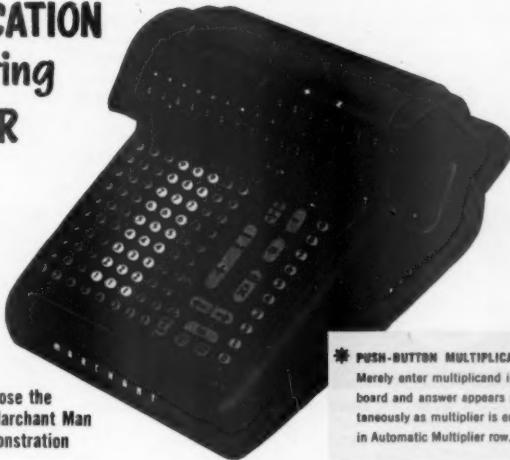
GUIDE TO MODERN FIGURING METHODS

ILLUSTRATED BOOKLET ABOUT MARCHANT CALCULATORS

MARCHANT CALCULATING MACHINE COMPANY

OAKLAND 8, CALIFORNIA

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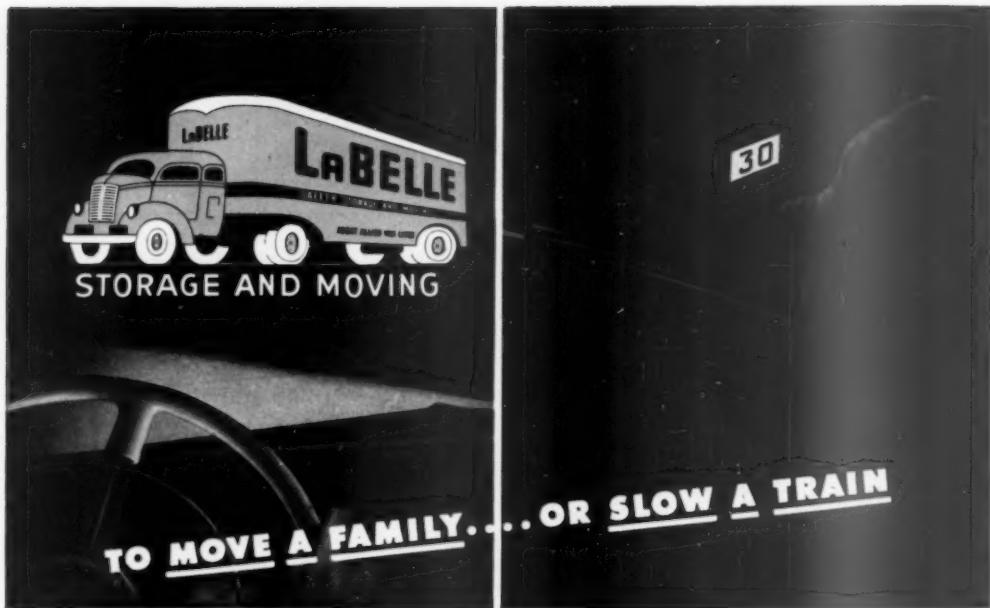


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Anyone who has anything to say to the public—whether it be an advertising message or a warning to reduce speed at a railway crossing—will say it

better in "SCOTCHLITE" Sheeting...say it with more IMPACT, day and night.

In every kind of weather, signs and signals of this new communication medium are giving around-the-clock service that cannot be matched by any other sign material. Brilliant by day, they come alive at night when touched by the headlight beams of passing vehicles. Their impact and beauty is so striking that nearby competing signs fade into insignificance!



AT LEADING GROCERS



AT THE POINT OF PURCHASE
reflectorized signs are more effective, have greater impact—day and night—require no electricity or mechanism.



CITIES, COUNTIES, STATES reduce accidents with signs that remain brilliantly visible under all weather conditions, twenty-four hours a day.



REFLECTORIZED FLEET EMBLEMS, warning stripes do a double job: prevent accidents, give you free advertising that SELLS on the finest possible position.

MAKE THE Flashlight Test!

Call your local sign supplier and ask him to make the FLASHLIGHT TEST right in your office! He'll show you how "SCOTCHLITE" Sheeting works.



REG. U. S. PAT. OFF.
SCOTCHLITE
REFLECTIVE SHEETING

For low-cost signs you can SEE day and night!



FULL HOUSE? Hotels, motels and tourist homes know that most motorists seek accommodations toward the day's end (at twilight, when visibility is poor). Ordinary signs are difficult to see during these best-selling hours. Signs of "SCOTCHLITE" Sheeting solve this problem—pull in the customers all night.

• • • • •
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Safety-conscious railroads operating in the state of West Virginia offer extra protection to motorists. They now post only reflectorized crossing signs . . . providing all-weather visibility as far as half a mile on the darkest night.



• • • • •
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to read?**

Many progressive cities have reflectorized street name signs with "SCOTCHLITE" Sheeting. After-dark visitors find it easy to locate houses of friends. Headlights provide ample light . . . legends are reflectorized clearly. No need for craned necks, special spotlights.



• • • • •
Another Highway Life-saver

Motorists drive with greater safety now—thanks to progressive highway engineers who have selected this new reflective material to mark traffic lanes. It's called "CENTERLITE" Reflective Compound. This new material has thousands of lenses embedded in a tough, durable binder that is applied just like ordinary paint—but lasts longer, gives 24-hour protection. That's why modern safety-engineered highways make it a standard!

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TRANSPORTATION



PASSENGERS on the big airliners may enjoy less luxury, more thrift, with . . .

Airline Fares Set for a Drop

To compete with railroads, the major scheduled airlines are considering cutting fares below rail rates. On some runs, fares have already been chopped.

The big scheduled airlines are cranking up for a major decision on competitive pricing: Should they slice virtually all air coach fares well below first-class rail rates?

Deadline for the decision is Mar. 1—30 days before the expiration of most air coach tariffs now filed with the Civil Aeronautics Board. CAB is prodding the airlines to make the cut (BW-Dec. 22 '51, p.20), despite the sharp upturn in costs.

• **Rail Rates**—This year and last, first-class rail fares have run about 4½¢ a mile, including berth or chair. The average air coach fare has been a shade higher—4½¢ a mile—with local variations below the rail rate.

Recently, CAB decided that it was time to shove the airlines into the mass transportation market, competing with the nonsked airlines, trains, and buses. It asked the airlines to expand air coach service and to lower coach fares.

On the very competitive, high-density routes, some airlines promptly reacted by proposing 3½¢ to 4¢ a mile rates. Their competitors were forced to join them. Here are some of the results:

New York-Miami. A 3½¢ fare is shaping up. National is there already, and Eastern is expected to climb down from above 4½¢ to meet the competition.

Los Angeles-San Francisco. This run is staying at its standard 3½¢. United and Western are both paced here by California Central, an intrastate carrier not subject to CAB.

Transcontinental. The rate is likely to stabilize around 4¢ for American, TWA, and United. An even lower rate was proposed by United, but CAB objected after American complained.

Now the airlines have to decide whether they will make similar cuts on the less competitive routes. In these sparser runs, CAB has recommended that night coach fares be dropped from 4½¢ a mile to 4¢ or even less. The same rates are suggested for the new air coach routes that CAB wants the airlines to open.

• **Tough Spot**—It is still doubtful whether many airlines will go along with CAB. And the agency will be on a spot if the lines balk and ask for renewal of the present 4½¢ rate.

The success of any fare cut of this

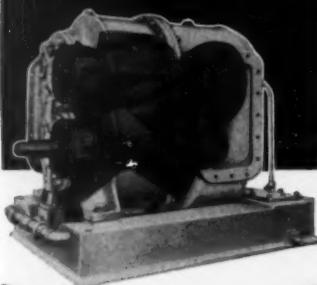
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" . . . United's skepticism about low-fare service bore bitter fruit . . . "

TRANSPORTATION starts on p. 77

type depends largely on promotion, as one CAB rate expert points out. If the coach service is to pay, most of the seats (say 60% to 80%) on the scheduled plane must be filled. The service is unlikely to succeed if the airline's heart isn't in the fare slash and its attendant promotion.

The transcontinental run provided a good example. Last October coach service between New York and San Francisco was started by TWA and United, the latter very reluctantly, just to please CAB. United's skepticism about coach service bore bitter fruit; TWA ran ahead on load factors. For the first three months of the service—October, November, and December—TWA's 60-passenger DC-4s showed load factors of 67%, 72%, and 80%. United, using 66-passenger DC-4s, hit 52%, 51%, and 64%. TWA's average load was 44 passengers, United's 37 passengers.

The main reason for the difference was that TWA put more push into making the service a success. For example, when a passenger couldn't make his flight, United charged him 100% of his fare, unless he turned in his ticket at least three hours in advance. TWA's identical flight let the missing passenger off scot free.

• **New Approach**—Since CAB launched its drive for lower coach fares, United has had a change of program, if not of heart. Its president, William A. Patterson, has decided that, if low coach fares are to get a trout, it should be a real one. Hence United's abortive demand for even lower fares, and the line's determination to give present service all-out promotion.

Two of the world's leading airlines, American and Pan American, never did share United's coolness to air coach service. Both big lines have now not only pruned coach fares, but have decided to order coach-version fleets new from the factory, instead of doing the usual conversion job on older planes. The tailor-made models will have high-density seating, heavy flooring, no kitchens, and other features of non-luxury air travel. Pan American is ordering 29 DC-6B coaches from Douglas. It estimates the fleet could carry 150,000 passengers per year across the Atlantic. American is also planning large-scale expansion of its coach fleet.

Another to take the plunge in a big way is TWA, which is converting much, if not all, of its DC-4 fleet and a substantial part of its Constellations to coach travel. National Airlines is con-

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British Industries Fair—London and Birmingham, May 5-May 16. For details or telephone the nearest British Consulate, or, Commercial Department, British Embassy, Washington 5, D. C.

verting all its DC-4s into 69-passenger coaches.

• **Smaller Planes**—To date only four-engine planes have been converted to coach use by airlines certified by CAB. That's because coach service has been exploited only on long-haul lines, with the single exception of Los Angeles-San Francisco. Now something new is developing. Consolidated Vultee is studying how to convert the twin-engined Convair-liner for short-haul coach work. It claims it can put 60-70 people in converted 40-44 passenger Convairliners 240s and the new 340s.

That fits in with a fond dream of CAB. The agency has been touting the joys of coach service for such short-haul runs as New York-Boston, New York-Washington, and New York-Buffalo. The ideal short-haul coach route links big cities between which surface transportation is slow.

One top fares analyst for CAB says he'd like to see one of the smaller airlines convert its entire fleet to air coach. A big airline can convert part of its fleet to coach, keep part luxury, and still have the flexibility to use the planes to the fullest extent. But if you divide up a small fleet, there's a serious loss of scheduling flexibility. Among the lines that CAB would like to see wholly, or almost wholly, converted are Mid-Continent, Braniff, Delta, and Western.

Airline Cuts Red Tape By Pre-Clearing Customs

Last week transportation officials started an experiment that may eventually eliminate one of the biggest headaches in international travel. American Airlines, working with U. S. customs officials, inaugurated a system of pre-clearance of customs that allows passengers bound for the United States to have their baggage checked in Toronto before boarding their plane.

Under the new setup, passengers will have their travel time reduced by from 10 min. to 20 min. between Toronto and New York, as all customs and immigration checks will be made in Toronto before the passenger boards the plane. The system will do away with the necessity of leaving the plane and opening luggage at Buffalo or—equally irritating—lengthy waits in New York. Passengers traveling beyond New York will be able to check their baggage to their final destination.

Government and airline officials are watching the experiment with interest; they hope it will become standard procedure.

International travel authorities agree that the experiment may be the first step toward such pre-clearance of customs in other parts of the world.



need help on steel strapping methods?

IT'S no coincidence that Donald Dougherty, Brainard Strapping System representative in Philadelphia, is showing this customer the proper use of a heavy-duty strapping tool.

Brainard's catalog lists over 1,000 items of steel strapping, tools, and accessories. It's the job of Don and his fellow Brainard representatives to see that the right equipment is applied to your operations.

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READERS REPORT



A Rug or Work of Art?

Gentlemen:

We were, of course, very happy to see BUSINESS WEEK's story on Alexander Smith's "Mimosa" rug, designed by Henri Matisse [BW—Jan. 5 '52, p26]. However, we would like to cast one raised eyebrow at your layout man. BUSINESS WEEK pictured the rug on its side.

We grant that a rug has to look well from any position. But Mimosa is not an ordinary rug. It is a translation in a pile fabric of a vertical design created for us by Matisse. Witness the artist's initials (HM) reproduced in the lower left-hand corner of the rug, just as he placed them in the original rendering.

Mimosa looks well from any angle. But it looks best in the vertical position. Actually, Mimosa makes an excellent wall hanging, and it is in this manner that the Museum of Modern Art and other leading museums have been showing it.

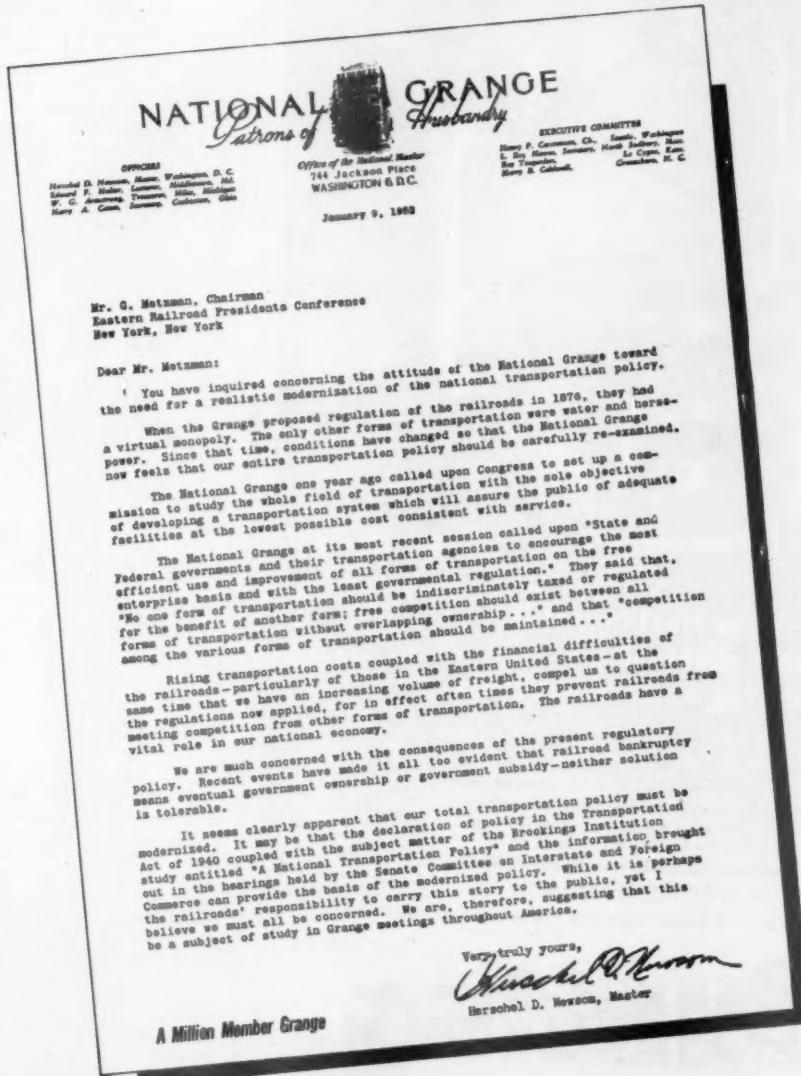
RICHARD P. AXTEL
DIRECTOR OF PUBLIC RELATIONS
ALEXANDER SMITH & SONS CARPET CO.
YONKERS, N. Y.

• BUSINESS WEEK's layout man professes too much admiration for Matisse and for Alexander Smith Co. to have entertained the idea that the one would design or the other manufacture a rug that failed to meet a major requirement for a floor covering—that it look well from any angle. In fact, BW suggests that the rug looks well from

(Advertisement)

Farm Group Urges Modernization of National Transportation Policy

*In letter to Eastern Railroads, the National Grange—which proposed
Regulation of railroads in 1876—now questions present Regulations*



The Eastern Railroads thank the National Grange for Permission to Publish This Letter

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yet another angle, the backside (see picture).

Money to Be Raised

Dear Sirs:

Your excellent article on "There's Money to Be Made in Brazil [BW—Dec. 29 '51, p97]" would have been more complete if it had added "There's Money to Be Raised in Brazil." No longer is it necessary for American manufacturers to furnish all the funds to establish plants. Largely as a result of the efforts of some young American investment bankers, a capital market is gradually being established in Brazil. Soundly conceived enterprises have no difficulty in raising cruzeiro capital through sale of common stock to the Brazilian investing public.

In 1946 the investment banking firm, Deltec S. A., was formed in Rio de Janeiro with mixed American and Brazilian capital. Traditionally, Brazilians prefer to invest in real estate or in closely held enterprises where profit expectations are high. So the chief problem was to tap the growing savings of small investors with no outlet for funds.

Finally in 1949 the pioneering began to pay off. In an effort to raise sorely needed cruzeiro capital for an American and foreign power subsidiary, Deltec conducted a door to door selling campaign among the power companies' customers. It was a struggle, but \$2-million of common shares were sold and paid for. The following summer an issue for . . . \$5-million of common stock was placed in short order, and Deltec was in business for good.

In the past year more than a dozen "investment banking" firms have hung out their shingles, welcomed competitors to Deltec in a market where there is plenty of room for all.

HENRY H. PATTON

U. S. REPRESENTATIVE, DELTEC S. A.
RIO DE JANERO, BRAZIL

Fluffed Fifo

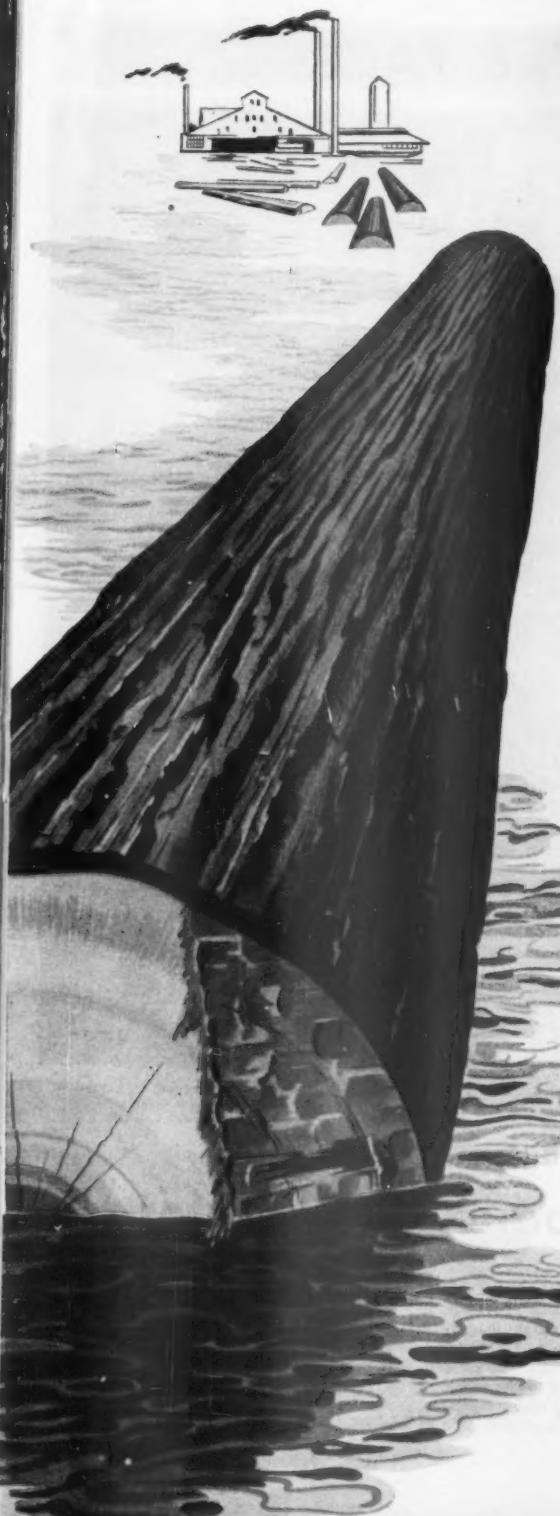
Sirs:

In reading the article on "Fifo vs. LIFO" [BW—Jan. 12 '52, p23] I noticed two errors: (1) The second paragraph of the last section should read "For companies using Fifo and other conventional accounting methods," rather than "LIFO." (2) Next to last paragraph should read "If this country should ever get in another period of deflation," rather than "inflation."

ERNEST E. WEINWURM
ASSOCIATE PROF. OF INDUSTRIAL
MANAGEMENT
STEVENS INSTITUTE OF TECHNOLOGY
HOBOKEN, N. J.

* BUSINESS WEEK noticed the error, too, after the magazine had gone to press.

BUSINESS WEEK • Jan. 26, 1952



They did

A certain wood mill operator* came up with the answer to a problem confronting many management men today: how to produce more with what he had. He could see light if he could hit on a plan to increase the production of his wood room, without increasing physical plant capacity.

what

His method of attack is significant. Rather than call for just a quotation when it came to selecting electrical apparatus, the operator asked Westinghouse engineers for an operating proposal, a workable scheme. His staff and ours developed a system of many devices—motors, controls and the famous Westinghouse Rototrol®—to drive his log haul, log carriage and hydraulic barker at full capacity. Result: the capacity of the wood room was greatly increased, the yield per log was increased, and maintenance was reduced.

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The formula used by this operator to solve his production problem can be applied to any industry, any manufacturing process. We want to work out that formula with you.

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NAMES & FACES



"The job is really two things: Find out what is holding back a particular program by breaking it down into its parts; then find the way to get rid of the bottlenecks."

CLAY BEDFORD IS

Production Man for the

On Jan. 7 this year the hierarchy of U. S. mobilization shifted. The change drew scant notice outside of Washington, because it involved a man little known beyond a circle of close associates. The fact that Clay Patrick Bedford, production expert to the Office of Defense Mobilization, was transferring from Charles Wilson's civilian side of

the Potomac to a new job at the far-shore Pentagon seemed a routine assignment.

Yet it was far more than that—even in the eyes of Washington cynics who automatically write off any attempt at straightening out "military muddlement." For in Clay Bedford, many people think, the Dept. of Defense is



"I never felt I had to ask for an exact definition of my authority."



"The base is pretty well covered now, as far as the bricks and mortar go."

Pentagon

getting one of the few men capable of unsnarling the kinks in U. S. arms production. "Maybe it's expecting too much of Clay in the four months he has," an ex-associate said. "But if he can't make headway, I don't know who can."

• **Expediter**—As the new special assistant to Secretary of Defense Lovett,



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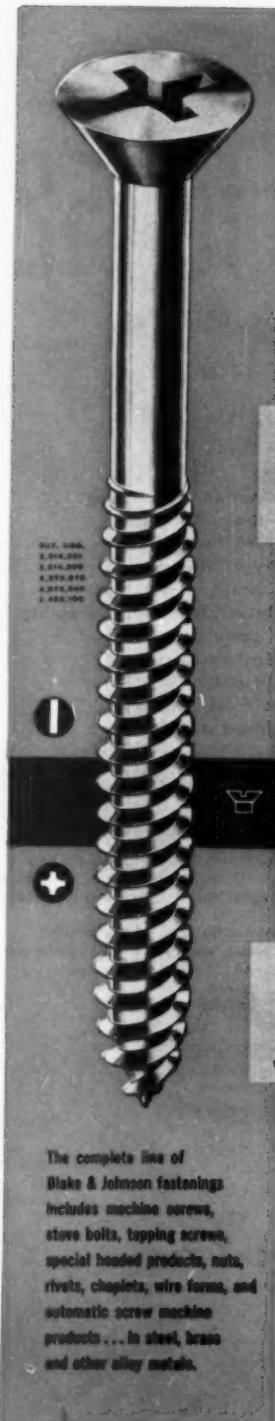
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Bedford is, in effect, expediter extraordinary. His appointment instructs him to give "particular attention to matters relating to the acceleration of production on those major items of military equipment that are of critical urgency." By Bedford's own interpretation, that means two things. Break down key programs to find out what is holding up production; find the way to get rid of the bottleneck.

For both assignments, Bedford seems eminently qualified. In the eight months since he came to Washington from Kaiser-Frazer Corp., he has built a remarkable reputation around the town. He has frequently been called "a production genius" by people who are cautious in their choice of words. His work as deputy administrator for procurement and production of the Defense Production Administration and as head of DPA's all-important Production Executive Committee gained him the title, No. 1 Bottleneck Breaker, a label he conscientiously avoids. His attack on the machine tool problem—and its ultimate success—is still regarded as one of the outstanding achievements of the production program.

• **Closeup**—At 48, Clay Bedford has been identified by one quipster as the man you wouldn't have noticed if you had walked through a crowded room and then come out. Slightly bald with close-cropped gray hair, he has a medium build and a style of dress that somehow manages to look tweedy, even when he isn't wearing tweeds. Neat and scrubbed, with rimless spectacles, he reminds you most of the vice-president that he is.

Bedford is not a colorful person, which probably explains why he is so little known outside his immediate coterie. Nor does he have those qualities of, say, a Harold Ickes that engender fanatical likes or dislikes. "This almost sounds naive," one veteran Washington reporter said, "but I've never heard a bad word against the man. It's not only that he's good. He knows how to get along with people."

Of his Washington jobs, Bedford will say that he doesn't "belong in this type of work." He feels his forte is in the field, where he says he can act and think like a production man.

- **Kaiser** *Bred*—Bedford is a person who has worked all his employable life for one man—Henry Kaiser. To some people, this alone is a monumental tribute; the elder Kaiser has seldom been regarded as the world's most placid boss.

Bedford came to Kaiser fresh out of Rensselaer Polytechnic Institute in 1925. (He had been born in Texas, raised and schooled here and there in the West as his civil engineer father moved from job to job.) Kaiser at that time was a small paving contractor

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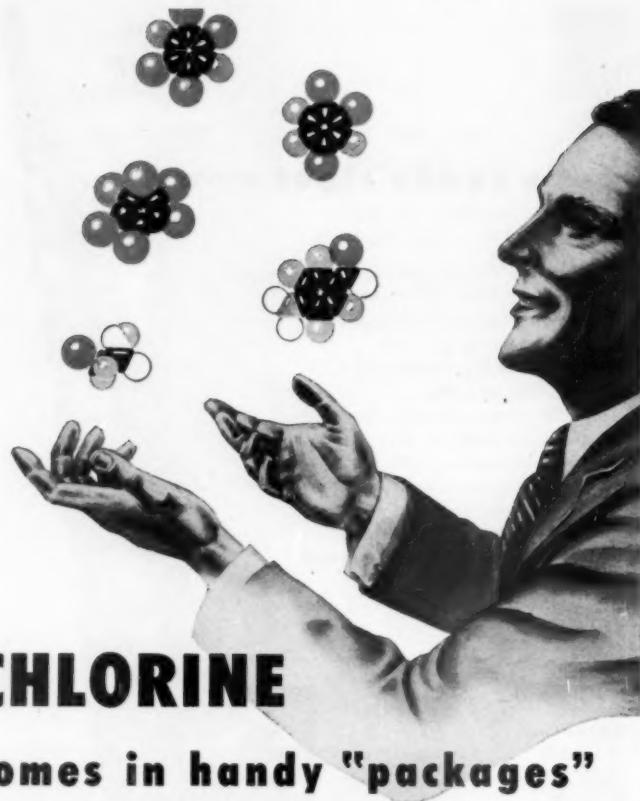
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"It's probable we should be giving more attention to letting contractors do their own components scheduling."

with, among other things, the contract for a Cuban highway job. Bedford, who was only 22, surprisingly wound up bossing the project, carried it off with notable success.

His rise from then on was in the classic tradition: manager of a pipeline project, transportation superintendent for the Hoover Dam construction, general superintendent on the Bonneville and Coulee Dam projects. In 1940 Kaiser turned him into a shipbuilder, a job that eventually made Bedford boss of four yards at Richmond, Calif. Between 1940 and 1945 he watched 727 ships slide down ways to war.

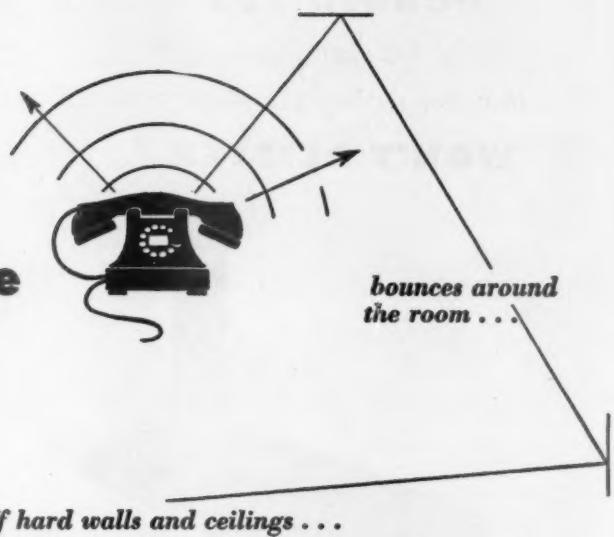
• **Competitor**—Bedford is probably best remembered from his nautical days for the feat of the four-day Liberty ship. As he does now, he believed then that competition could accomplish practically anything; he had proved it, he felt, by his experience in splitting dam jobs between two crews, then watching the results as the two teams fought for the best completion record. The four-day ship really began, Bedford recalls, when Edgar Kaiser's crew in the Oregon shipyards turned out a vessel in 10 days, against what was then Bedford's record of 24.

"We cut your time by more than half. What do you think of that?" Kaiser wired Bedford. Bedford acknowledged that it was "pretty good," then went to work on his crew with a version of a coach's half-time pep talk. In time, the Richmond yards produced a ship in four days and 15 hours. "We cut your time by more than half. What do you think of that?" Bedford wired Kaiser.

Bedford admits they never found out.

• **Autos**—After the war Bedford took over the production job at Kaiser-Frazer as vice-president and later executive

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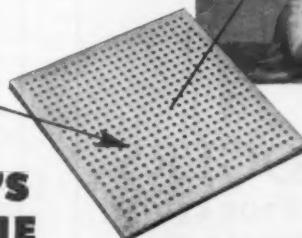
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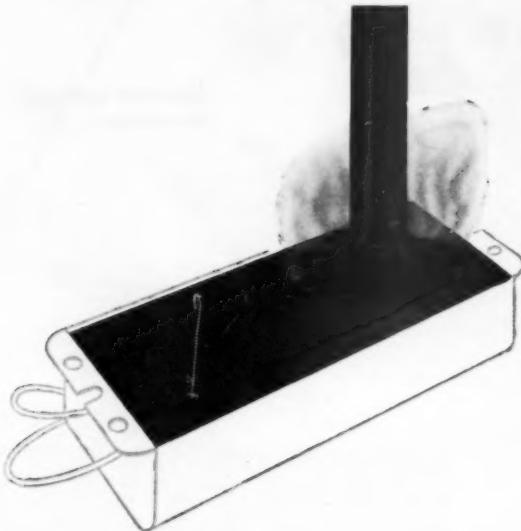


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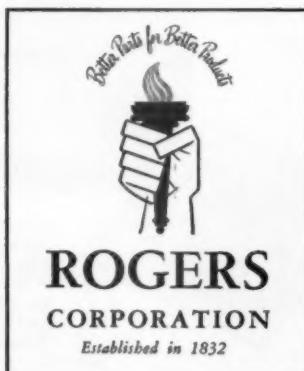


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"I'm at the opposite end from the Rotarians. I'm not primarily an extrovert."

vice-president. To his credit, K-F competitors, who generally hold the company in rather low regard, still speak highly of him. Auto men say that Bedford did some remarkable things. The company had no steel and no record on which to get any. By weight of perseverance and ability alone, Bedford maneuvered a few fantastic deals, trading raw materials and money three and four ways at a time in order to get the end result of automotive sheets.

Bedford had just been pulled away from K-F to work on Kaiser defense projects on the West Coast when he got the call to come to Washington last May.

• **Cool Reception**—Unquestionably, his appearance on the scene as assistant to Charles Wilson was resented by some people. Justified or not, the feeling was that the Administration had brought pressure on ODM to get a Kaiser man into its top ranks.

It is understatement to say that whatever resentment there was has disappeared. The feeling about Bedford today is pretty much in keeping with Charles Wilson's reported remark that, "If I had it to do over again, I'd pick Clay Bedford for my team at the very start."

• **Performance**—Much of Bedford's acceptance traces back to his handling of the machine tool problem, when he was a DPA deputy. It was Bedford who pulled the first log out of the tool jam with his work on the pricing order of July 9. "Clay got no place trying to argue out an order with the industry," one man who worked with him recalls. "So he went ahead and wrote his own book, putting in everything he could think of. Then he sat down with the same industry people and, by compromise, persuaded them to agree to things point by point. When he had finished, he got Wilson



Aladdin and the "Al Kali"

You remember the story of Aladdin and his magic lamp. But what never came out in Arabian Nights was the probability that Aladdin might well have used "al kali" to cleanse and polish the old lamp, when he made the discovery of its magic properties.

The origin of soda ash—oldest of the major industrial chemicals—is veiled in antiquity. Its history goes back at least 5,000 years through the civilizations of many peoples. In various parts of the world the ashes of plants were leached to obtain soda. One of the plants so used by the Arabians was kali, and their term for soda, al kali, became our word alkali.

The miracles of modern industrial chemistry of course far surpass the magic of Aladdin's lamp. Many of these industrial processes and products employ alkalies to bring to our civilization a multiplicity of refinements undreamed of even a few short years ago. As one of the nation's leading producers of alkalies and related chemicals, Columbia-Southern salutes the achievements of the industries it serves.

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to approve the order, and that was that. The 12% price increase over pre-Korea, and the other things Clay had drafted up, started the tools moving."

Perhaps Bedford's toughest assignment was his part in getting the armed services to schedule their needs on an urgency basis. This is actually a continuing problem, one that Bedford will still have to grapple with in his new job. But a lot has already been done. The military has been forced to accept a realistic system of priorities.

• **Persuasion**—Bedford admits he runs his jobs mainly by persuasion. "Most people are reasonable, you know," he says. "All you have to do is convince them you're right." Most of his convincing, however, is done not at the board-room level, but on the production lines. He believes the only way to solve a problem is to get out in the field and look at it. People who have been with him on inspection trips say he has an uncanny knack for spotting bottlenecks on the line, that he can almost hear from the general hum of a plant when something is wrong.

Bedford is a proponent of what might be called the scatter technique in working through problems. When he gets stopped by something, he believes in breaking the puzzle into pieces, then solving each chunk in succession.

• **Criteria**—Bedford's new job with Defense Dept. is a four months' tour only. He was set to leave Washington in December, before he got talked into taking the new assignment.

"My assisting Wilson was in the policy area. Over here, I'll be dealing more with the operations level," he says of his Pentagon job. "When you are a special assistant, you have to work."

The big assignment, as Bedford sees it, is to decide which things come first, now that the military has made up its mind to put first things first (BV-Dec. 29'51,p25). In the main, he will use three criteria: (1) How important is the item strategically? (2) Is it behind schedule? (3) How important is the item? The first and last points, Bedford admits, seem to overlap. But there is a difference: A particular weapon, vital to some long-range strategic plan, may be much less important compared with other weapons to be used right now. The fact that the strategic consideration is placed first is significant: It means an increased concentration on long-range planning.

• **Future**—Once his tour is finished, Bedford plans to head back to Kaiser and something like a normal family life again (he has three children). As for politics, he has no aspirations. He describes himself only as a "mild Republican." He much prefers his golf and skeet-shooting and being "just a production man."



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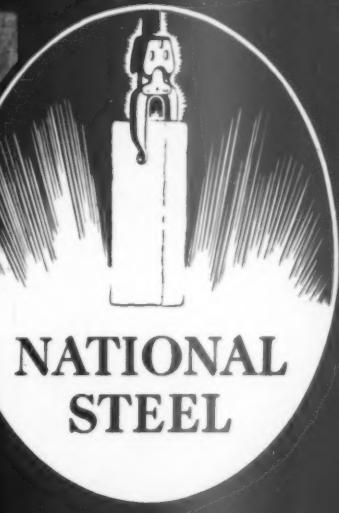
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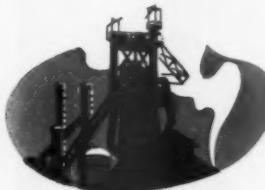
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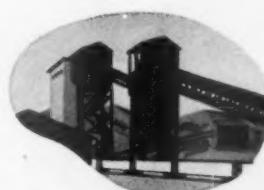
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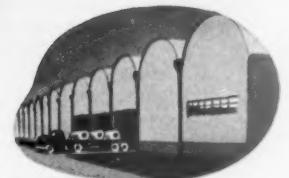
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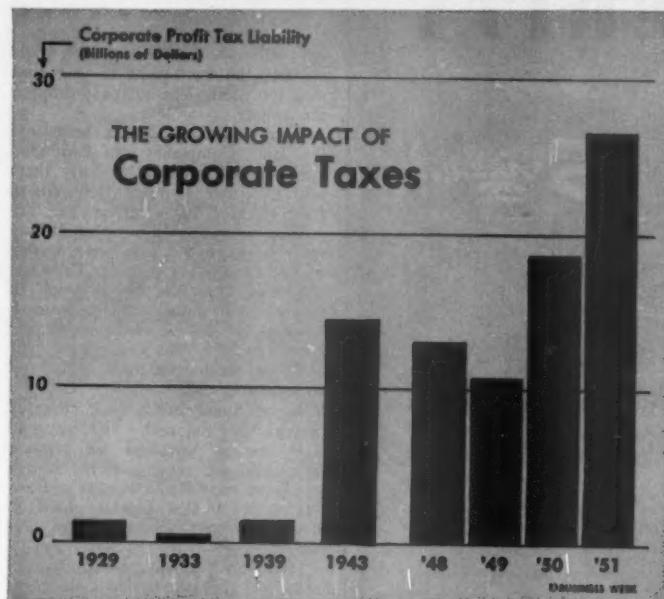


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ECONOMICS



Business Question Mark

Some realize it and some don't—but most businessmen today are flying blind when it comes to long-range planning for their businesses. So are most economists.

Causing the fog: today's level of corporate taxation. The federal government is now pulling in 60% of all corporation profits—nearly \$27-billion last year. Taxation at anything like this level is without precedent in a competitive peacetime economy. And at this level taxes become a new kind of thing—not just a deduction from profits, but a major element in business figuring, on the same plane with such traditional factors as the payroll or the cost of raising money.

And it's all so new that neither working businessmen nor economists have any clear idea of how this new wild card is going to change the game.

BUSINESS WEEK reporters have been talking to both groups about the effects of today's taxes on company policymaking. They find a wide concern with the problem (BW-Dec. 15 '51, p19), no agreement at all on what it means.

• **Puzzlers**—Here are some of the baffling questions that keep presenting themselves:

• By standard economic theory, taxes at the present level should be a

serious drag on business, should have practically wiped out the incentive to expand. There's no doubt they're a drag on some business, but so far no such effect on investment as the theorists expected has shown up.

• More than a third of the federal government's income now comes from taxes on profits—which are fast changing and highly unpredictable. If the economic climate changes, what effect will that have on government operations? And in turn, how will government reactions affect the economic climate?

• Businessmen trying to plan ahead are stymied by having to deal with a new factor about whose future levels they are ignorant and over which they have no control. Officially, the present tax rates are temporary; the excess profits tax expires in June, 1953, the regular tax law a year later. But no realist feels any confidence that rates will get back any time soon to the levels of, say, 1948.

• **Little Problem**—Consider, for example, such a relatively simple problem as the case of the Whitin Machine Works and its gift to the town of Northbridge, Mass. Whitin is located in Northbridge, pays about 35% of the local taxes. A few weeks ago Whitin

gave the town a free gift of \$100,000, requiring only that it be used for "public purposes"—presumably for expenditures that would otherwise have had to be met out of tax revenues. By this move, Whitin saves the other taxpayers in the town \$65,000. And since Whitin is in an 80% tax bracket, the \$100,000 outlay only costs it \$20,000 in reduced net profit. Moreover, Whitin itself may save \$35,000 of local taxes, which would cost it \$7,000 of its own money, \$28,000 of federal tax deduction.

All in all, it looks as if Whitin has bought \$65,000 worth of local goodwill for \$13,000.

Maybe it has, but the company can't be sure. Next year it expects to be doing a larger proportion of military business with a lower profit return. This may leave it an excess profit credit it could carry back to 1951—so its gift may end up costing it several times as much as \$13,000.

• **Big Problem**—Whitin's bafflement is exasperating enough, but nearly every healthy company faces a far more significant and far more baffling dilemma:

• Taxes are forcing down its net return on sales. There are two good ways to lick that—it can expand its capacity and sales, increase its gross profit, and thus prevent the dollar total of its net profit from dropping; or it can improve the efficiency of its plant, cut costs, increase its gross margin on sales, and thus maintain its present net rate of return on sales.

• But to do either of these you have to invest money. And the very taxes that make investment necessary pose the prospect of a smaller return on investment than ever before.

The dilemma: You have to invest more, but you shouldn't.

Some businesses can find a way out of this tangle by hunting out new investments that will cut costs miraculously. The rapid changes now going on in technology offer quite a few chances for such fabulous savings. But this way out is not open to every business by any means.

• **How Much Risk**—The other great dilemma is in weighing risks. Does today's tax structure add to—or ease—the risk you take in making a big investment?

There's the case of an oil company that had a new \$15-million refinery on the drawing boards. It promised to pay for itself—leaving taxes out of account—in two or three years. But the company operates in the peak excess profits tax bracket. After taxes, it figured, the refinery would take at least 10 years to pay for itself. And the chances that

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"... The cold war may last a decade . . ."

TAXES starts on p. 97

some still-to-be-developed process would obsolete the new plant in that time were too good. The company dropped the project.

There are some breaks built into the law. Companies can carry forward losses five years, or carry them back two years, to offset the profits of good years. A big company, too, can use the insurance principle. It can offset a loss from a new plant against income from other plants. Then the biggest effect of the loss is simply to reduce taxes—since the government takes up to 70% of profits on over-all operations. So, the government may well take the biggest share of the risk on a new operation.

• **Big vs. Small**—For a small company the risks are different. The law does make special provisions for growing companies, and small concerns as well as big can carry losses forward or back. But most small companies have to finance their growth from retained earnings.

Moreover, a small company has no insurance. If it gambles on a new product and loses, it has no other profits against which to offset the loss; it's out of business. That's what led a Seattle businessman to say, "there is no such thing now as risk capital for a small business. People just won't take the risk."

• **Dim Future**—But you encounter the really big risk on any future bet.

Businessmen have to look ahead five or 10 years—perhaps 20—whenever they make a big investment. Never before have they had to do that with taxes at anything like this level, except in wartime. But then there was little private investment, anyhow. And there was the clear prospect of substantial tax relief once the shooting stopped. Today there's no real relief in sight. The cold war may well last a decade. The United States' mobilization plans are based on the expectation of maintaining armed forces at a high level for years to come.

So, while the excess profits tax may die, corporation taxes are likely to stay high as far ahead as you can see.

Many a businessman has looked ahead and not liked the prospect. As one of them put it to BUSINESS WEEK: "We'll finish out our current expansion program—then we're pulling our horns in." Another said, "There just won't be enough people who'll put money into the show with taxes at this level."

• **Academic Issues**—The economists have a different set of problems.

As one of them says, "Someone's go-



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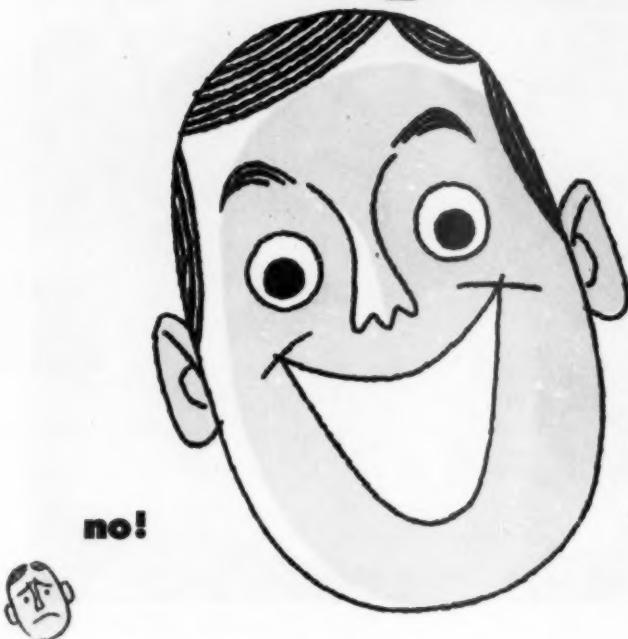
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"... 'Taxes tend to kill the incentive' . . ."

TAXES starts on p. 97

ing to have to do some hard thinking on the whole theory of taxes and their effects. For example, there's no sign yet that high taxes have slowed up the flow of investment as you would expect them to."

Investment, in fact, is soaring. Despite the post-Korea taxes and this year's tightening of credit, industry is spending at a record rate—an annual rate of about \$25-billion a year—for new plants and equipment. And the indications are that 1952 will see new records.

Another economic poser: Are big companies getting stronger—and small companies weaker—as a result of today's taxes? Quite a few businessmen report to *BUSINESS WEEK* that they think so. But, as yet, there's no clear trend.

The picture on incentives is also far from clear. Traditionally, economists have figured taxes were a deterrent—and the higher they were the more they'd slow down business. And a few of the businessmen surveyed by *BUSINESS WEEK* feel that way. A Rochester manufacturer puts it: "Taxes tend to kill the incentive of the managerial group, many of whom now are working simply because they feel they are making a contribution to the welfare of the nation, or they want to keep busy." But for others the new taxes are actually an incentive—to drive ahead, to cut costs, to expand to offset the cut taxes take from profits. And the possibility of the capital gains tax—no more than 26%—is leading many an investor to put down speculative bets.

• **Stability?**—Perhaps the biggest question for economists and for government policymakers is stability: What would happen, with these taxes, if business turned down?

For businessmen, there's some consolation in the fact that taxes would drop even faster than profits—which themselves would drop faster than the level of business. And that bolsters those who believe in countercyclical financing by government to offset fluctuations in business. As business slowed down, the government's take from taxes would drop rapidly. And, to maintain its expenditures, the government would soon come to deficit financing. That, by the theory, should give business a shot in the arm.

This automatic balancing might help. But it would still leave business with a major road block: Why make any new investment with business off and taxes high? That feeling might depress capital investment—which over the years has gone hand in hand with general prosperity.

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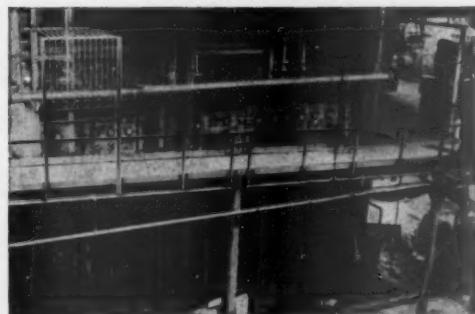
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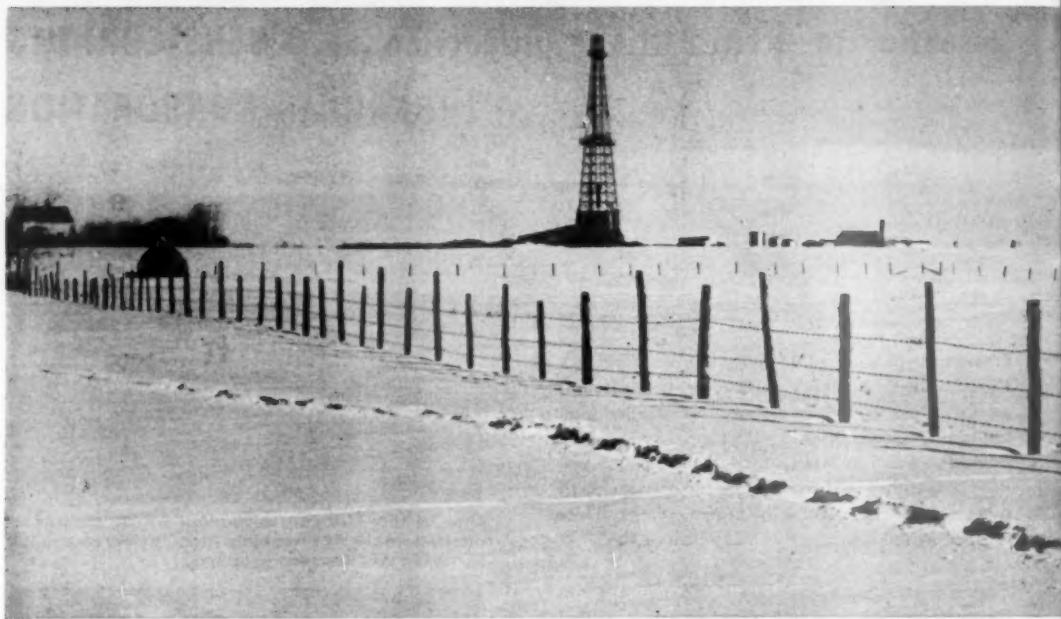


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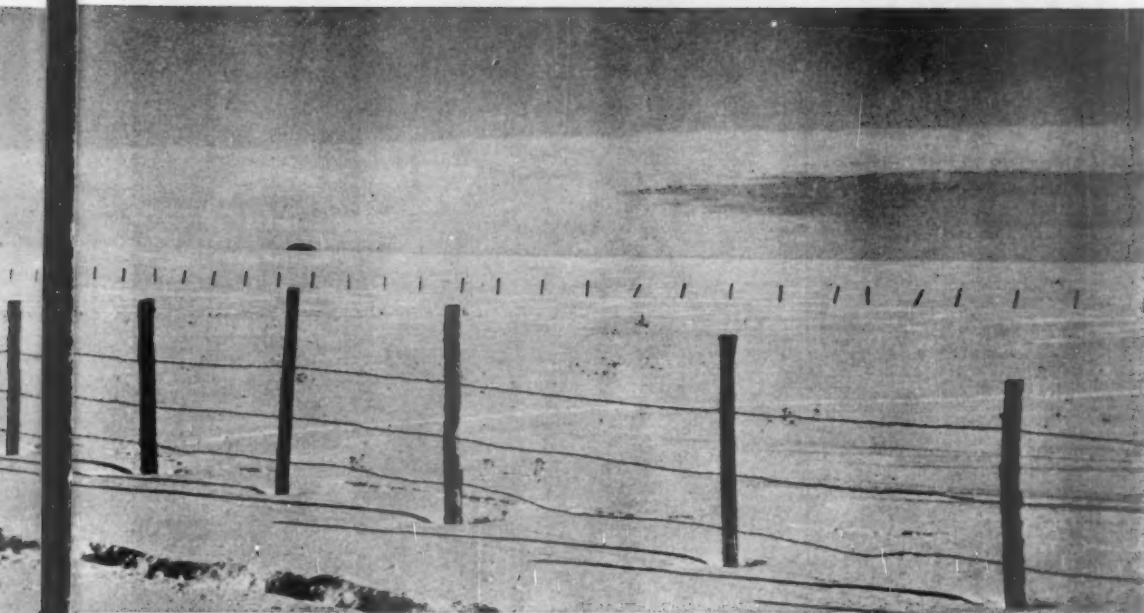
Fiberglas Preformed Insulation, discharged from curing oven is cut to size at Owens-Corning's Kansas City Plant.

CANADA



ON THE PRAIRIES, near Edmonton, Alberta, stands Imperial Leduc No. 1 as it looked in February, 1947. Today the Leduc field is a for-





est of oil derricks 17 mi. by 8 mi., the center of Alberta's booming production. And in bordering provinces, new finds raise the question . . .

Prairie Oil: Where Are 1955's Markets?

In the icy winter of 1947, an Imperial Oil, Ltd., drilling crew was working on the prairies southwest of Edmonton—and was sure it had paydirt. Preliminary tests showed oil—probably a lot. So, risking a fizzle, Imperial invited people from miles around to watch the well come in on Feb. 13.

Alberta government officials, oil men, city fathers, radio and press people shivered in the cold and watched. Imperial Leduc No. 1 shuddered, blew off its gas and mud. Then oil whistled, snorted, and bubbled into the storage tank nearby.

Canada's oil boom was on.

• **What It Means**—This month, five years later, you can make a pretty good estimate of what the discovery well in Alberta has meant to Canada, to the U.S., to Imperial Oil. For the future, the sky is pretty well the limit. New oil finds are spreading beyond Alberta's border; last fall next-door British Columbia had its first strike, a few weeks ago Saskatchewan came in with its first promising medium-gravity crude.

For Canada, Leduc almost overnight remade the economic map of the prairie provinces. Now it's remaking Canada as a whole. Without the discovery of

ample, cheap crude within their borders, Canadians would have been hard put to solve the problems of their growing pains—long-distance transport, new manufacturing, expanding agriculture, mining, development of the far north.

In 1947 Canada was importing 90% of its oil needs, producing a measly 7.6-million bbl. yearly out of diminishing reserves. Today reserves have increased 34-fold—they're close to 1.7-billion bbl.—and production is up to 48-million bbl. George L. Stewart (cover), president of Imperial Oil, figures that Canada will be self-sufficient in oil in another five years. Add to that the dividend of Leduc: natural gas reserves now pegged at 11-trillion cu. ft.

For the U.S., Leduc opened a brand-new investment field. Almost every U.S. oil outfit of any size (Imperial itself is 70% owned by Standard Oil Co., N. J.) flocked into the field. For everyone else in the U.S., where natural resources are by no means limitless, Canadian oil provided a comfortable, safe supply against leaner years to come.

For Imperial, Leduc brought spectacular successes. Until the strike, Imperial led a placid existence, expanding slowly with Canada. Since, assets have

increased two-and-a-half times, making it one of the few outfits in Canada in the half-billion-dollar class. Right now, Imperial is charting its biggest expansion ever; five years hence it may well be a billion-dollar concern.

One piece is still missing from the expansion design. The huge reserves envisioned would have to find much larger markets than now exist. Perhaps the answer may lie in the U.S., perhaps in eastern Canada.

I. Old Hand

Imperial had earned its big break at Leduc—though some credit has to go to the Canadian government for tax concessions spurring the search. Imperial had been looking for oil in the prairies since 1919; in the 10 years preceding Leduc, Imperial had sunk better than \$18-million in 114 dry holes. But Leduc was no stroke of luck. For 70 years in the oil business, Imperial had rarely missed a trick.

• **Integrated Operation**—Imperial Oil is completely integrated, a giant that overshadows all its competitors in exploration, production, refining, transport, and marketing. It holds one-seventh

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of the 166-million acres under lease or reservation by the Canadian oil industry, sits on nearly one-half—around 600 million bbl.—of Canada's net recoverable reserves. Its nine refineries, handling 202,000 bbl. daily, control more than 50% of Canadian capacity; through 1,440 bulk plants and 9,466 retail outlets it markets nearly as many barrels of oil products—63.6-million bbl. in 1950—as all its competitors combined. It owns and operates 23 ocean and lake tankers, 2,380 railroad tank cars. It operates, or has under construction, 642 mi. of pipeline; it was prime mover behind, and is part owner (49%) of, the huge, 1,126-mi. pipeline linking Edmonton and Superior, Wis., and the 695-mi. Trans Mountain line (Imperial owns 8.6%) now building between Edmonton and Vancouver (map, page 102).

• **Covers Canada**—Imperial sells in every nook and cranny of Canada—from Newfoundland fishing hamlets to Vancouver Island, from the U. S. border to beyond the Arctic Circle, where Imperial's northernmost agent hangs out his sign at Aklavik.

Imperial got its start down in the tip of southwestern Ontario, with the

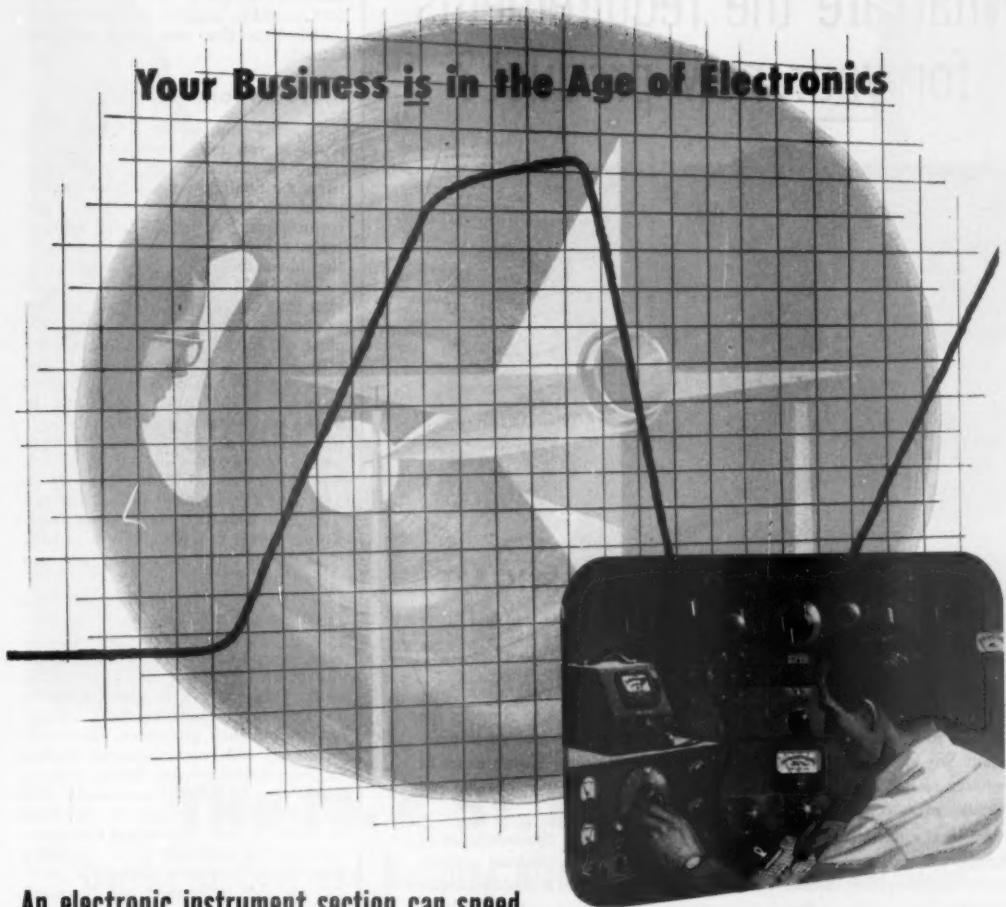
merger of seven small refineries in 1880. The idea: to meet competition of Pennsylvania oil. That area, around Oil Springs, insists it's the cradle of the North American oil industry, even beating out Titusville, Pa., as the continent's first producer.

The new company went west with Canada before the turn of the century. As the railroad moved across the plains, each fledgling settlement would have its station, its grain elevator, its Imperial storage tank clustered next to the right-of-way. But Imperial overreached itself on continental expansion, found it had no funds for a badly needed refinery and bulk transport equipment. Canadian and British investors then preferred the get-rich-quick returns of oil production, were slow to help develop a sound, integrated industry.

• **U. S. Capital**—Imperial directors figured that if they didn't increase the industry's capacity someone else would. So they approached Standard Oil Co. in the U. S.; Esso liked what it saw, put up the capital in exchange for majority interest.

Today Standard owns 70% of Imperial's stock. But Imperial officials, like

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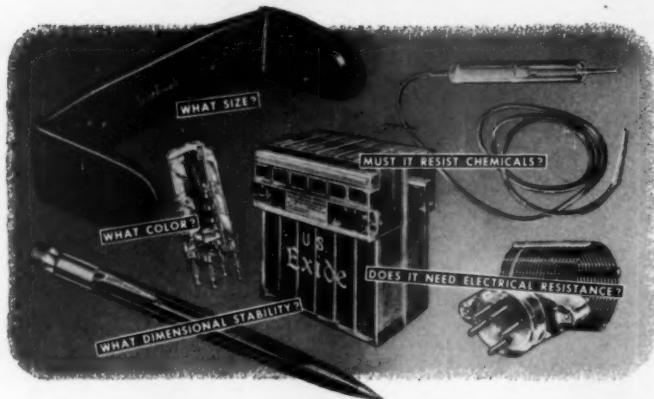
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most Canadians, boast that it is a Canadian company, run by Canadians for Canadians. Imperial has more native shareholders than any other outfit in Canada.

II. Teamwork

Imperial—and Standard Oil—officials scowl if you ask whether the parent dictates policy to the affiliate. They insist it's a family arrangement—with Imperial the fair-haired boy. There's no control, just the usual interchange of information and the personnel swap that characterizes the Esso family.

Like Standard, Imperial is managed by a team of "working" directors; none of them has an outside job, most have come up through the ranks. All but two were born and raised in Canada; one came from Britain as a youth; one was imported from Standard in 1946 to steer the producing department.

• **Solid Citizen**—The leader of the team—like the company—is an old hand. George L. Stewart joined Imperial in 1916, came up through the refinery end of the business, was named board chairman in 1947, moved up (by Imperial's ranking) into the president's slot two years later.

Stewart, in his early sixties, was born in Winnipeg, took an engineering degree at McGill University. After graduation, he stayed on for a time as an instructor. He still likes education work, keeps alive a company tradition of frequent bullsessions with college seniors and their professors. He's a mild-mannered and conservative—no junketing supersalesman type, forever dashing off to view Imperial's vast domain. His associates figure he gets a lot more done—in a less spectacular manner—burning the midnight oil at Imperial's Toronto headquarters. Stewart is modest, not shy; progressive and aggressive in a quiet way.

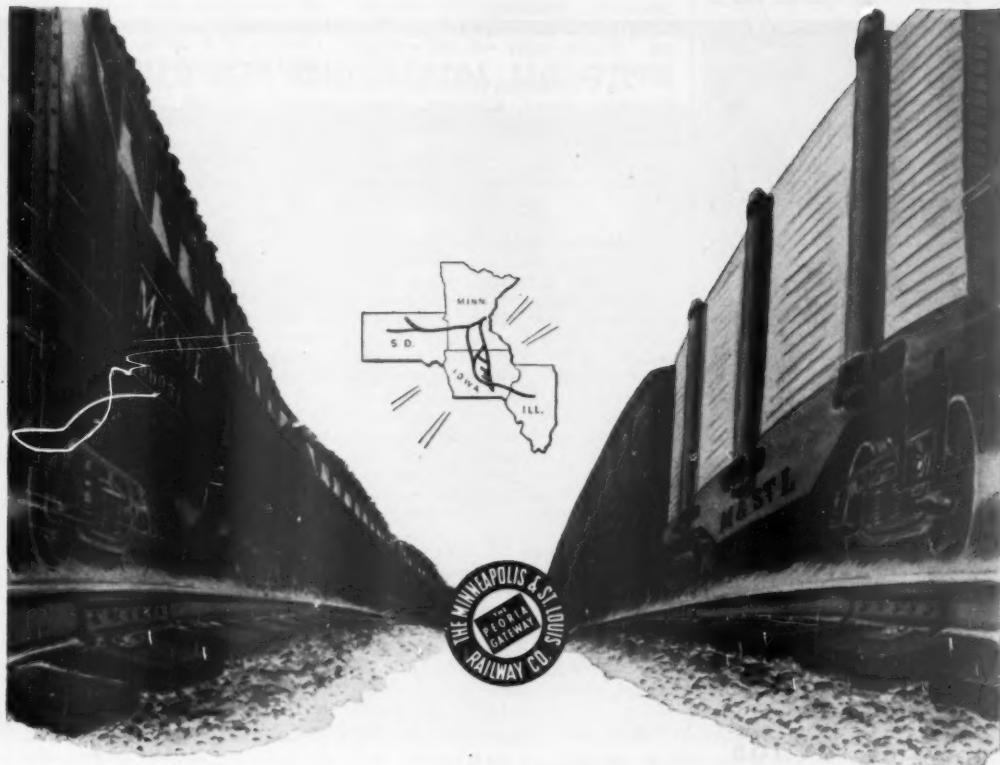
One Imperial official put it this way: "Guess you'd call him a 'solid citizen.' The kind of fellow you'd want to talk to if you had a deep personal problem."

III. Boom Goes On

Oil men are betting that solid citizen Stewart and his team will keep—maybe increase—their commanding lead in Canada's oil parade. Since 1947, the industry pumped \$1-billion into Canadian oil; Imperial accounted for 25% of the investment.

That kind of capital outlay shows no signs of lagging. Spending by the industry between 1952 and 1955 may in fact hit \$1.7-billion, depending on future discoveries, world price, and market trends. Stewart expects more and more oil finds in the West.

• **New Facilities**—You get an idea of what's cooking from Imperial's 1952 expansion budget of \$90-million. Half



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the money will go into new acreage, exploration, producing; 25% into refining; 25% into transport and marketing. Projects under way and planned include:

- A \$33.6-million expansion of the Edmonton, Sarnia, Vancouver refineries. Regina's refinery may get a face-lifting, too.
- A 188-mi., \$9-million refined products pipeline between Sarnia and Toronto. A new, \$4.2-million lake tanker.

• **Exploration Goes On**—Those new facilities will be needed—and then some. Though five years have passed since Leduc, exploration in the West goes on at a feverish pace. There are 153 geological survey teams in the field; Imperial is in first place with 23. Some 103 rotary rigs are wildcatting in search of new strikes; 13 fly Imperial's colors. And the excitement is continually sparked by success in finding new fields in Alberta (1951 brought 35 important strikes). What's more, the fall and winter have brought key discoveries in British Columbia, Saskatchewan, and Manitoba.

Oil men are confident that Canada will turn up reserves of oil several times today's 1.7-billion bbl.

If discoveries keep the same pace as in recent years, Canadian reserves should hit 3-billion bbl. by the end of 1955. That would be one-eighth the present reserves in the U.S., which is sitting on 28% of the world's proven supply.

IV. Problem

It's that glowing picture of booming reserves that worries Canadian oil men. Stewart sums it up simply: The No. 1 problem for Canada is finding markets for Alberta's crude.

• **Opening Markets**—It has been the problem ever since Leduc came in—and a good part of the job of trying to solve it has landed on Imperial's doorstep. Imperial's first move, right after Leduc, was to transplant an entire refinery from the Yukon to Edmonton. It bought a U.S. war surplus plant for \$1-million, hauled it piccemeal in huge trucks down the Alaska highway to Dawson Creek, sent it by rail to Edmonton, and put it back together again. Another big step was to help organize the Interprovincial Pipeline; Imperial is one of the key sponsors of the Trans Mountain line now building between Edmonton and Vancouver.

By 1954 markets for Alberta crude will probably be up from the present 133,000 bbl. daily to 238,000 bbl. But by that time, Alberta's production may be over 420,000 bbl. Pipelines will help move some of the increase. Interprovincial Pipeline plans to boost the tonnage it carries east; Trans Mountain, to be completed in 1954, can move more than

supply Vancouver. But at best Canada will have a hefty daily surplus looking for a market.

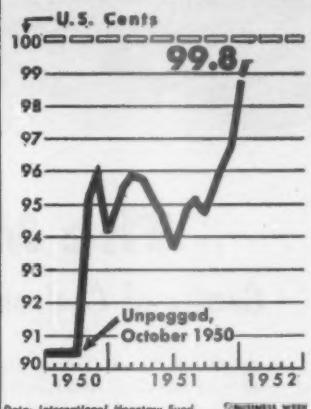
• **Shot at U.S.**—What Canadians are aiming for is a shot at the market in the U.S. Pacific Northwest—which now consumes 225,000 bbl. daily—and the oil deficit area around Minneapolis-St. Paul. The coast is short of light-gravity oil, as evidenced by talk of a Texas-California pipeline.

But the U.S. tariff on oil imports—53¢ a bbl. on refined gasoline, 21¢ on crude—bars the door. What the Canadians propose is a continental pooling of oil resources, a deal whereby Canadian oil comes to the U.S. duty-free as an offset to the U.S. oil Canada must import in the East to feed its big refining capacity (140,000 bbl. daily) at Montreal.

If Alberta oil fails to come to the U.S., Canadians feel they'll have to extend the market eastward to Montreal—at a tremendous economic cost.

CANADA BRIEFS

What Canada's Dollar Is Worth



Set to break par? Canada's dollar, long at a discount, was just a shade under its U.S. counterpart this week. The startling rise since October, 1950, is due to foreign investments pouring into Canada at a \$1-billion-a-year rate and Ottawa's sound money policies. It was just last month that Canada wiped out all exchange controls.

An ore-carrying pipeline—7½ mi. long and made of wood—was finished last week by International Nickel Co. of Canada, Ltd. It's to transport bulk concentrate from nickel-copper ore from International's mines at Creighton, Ont., to reduction plants at Copper Cliff, Ont. Company officials say



OUTDOOR INDUSTRIAL LIGHTING



MODERN OUTDOOR LIGHTING HAS MADE THIS PLANT STORAGE AREA AS ACCESSIBLE AT NIGHT AS DURING DAYTIME OPERATIONS.

Double your plant area's usefulness by providing G-E outdoor lighting

Long ago good management tripled productive capability by providing proper *indoor* lighting—making possible extra work shifts when needed.

Now you can have 'round-the-clock "daytime" whenever you need it *outside* your plant as well as inside, with G-E outdoor lighting.

At relatively small cost, you can actually double the usefulness of your plant area facilities by doubling the time in which men can work there.

For example, in the above photograph, the outdoor area is used for storage of rough castings. When additional work shifts were added, it became necessary to light this storage area so that needed

parts might be readily located—regardless of the time of day. (Many plants still on one-shift operation avoid interrupting production by doing all their heavy materials handling at night.)

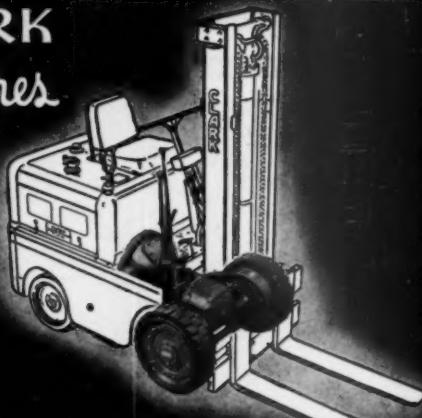
Moreover, good outdoor lighting will provide protection against pilfering, sabotage and costly accidents.

In these and many other ways, your investment in adequate G-E outdoor lighting will pay for itself over and over again. Write for the complete story in GEA-3640, "Outdoor Lighting for Industrial Plants." Address *General Electric Company, Schenectady 3, N. Y.*

GENERAL  ELECTRIC

451-316

CLARK
features



A CLUTCH YOU CAN CHANGE IN 80 MINUTES



LIFTING THE CLUTCH
OUT OF POSITION

AT YOUR SERVICE

At the other end of your telephone is CLARK'S world-wide Service Organization ready to give you every needed help where you need it—when you need it. You'll find the Service Organization nearest you listed in your Classified Telephone Book under "Trucks, Industrial."

THE CLUTCH is far and away the most vulnerable part of a fork-lift truck. It takes the brutal strain, torture and wear each day of hundreds of stops, starts, "inchings" maneuvers, shifts from forward to reverse and vice versa. In just one week of work it takes more punishment than your car's clutch takes in a year.

CLARK Engineering has produced a better clutch—a clutch that stands up longer under severe use than any other we know of in the fork-truck field. Yet even these superior clutches reach the point where replacement is an unavoidable necessity.

But here, too, CLARK Engineering has demonstrated its superiority by producing:

- ★ a truck design which is unrivaled for simplicity, speed and economy in the removal and replacement of worn clutch
- ... a design in which clutch-replacement requires a mere 80 minutes ... less than an hour and a half!

This QUICK-CHANGE CLUTCH is just one of MANY good and important reasons why it pays to standardize on CLARK equipment for handling materials.



Fill in the
coupon, attach it to
your letterhead and mail it.

CLARK ELECTRIC AND GAS POWERED FORK TRUCKS

AND POWERED HAND TRUCKS • INDUSTRIAL TOWING TRACTORS



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Please send: CLUTCH DATA SHEETS MATERIAL HANDLING NEWS

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Zone _____

State _____

it saves time and money, will make possible working of lower-grade ore.

Auto dealers, appliance salesmen have hopes that Ottawa's new instalment credit rules will boost sales. The new deal, effective last week, allows 18 months to pay, 50% down on autos, one-third on other items. Before, Canadians had to pay in 12 months.

Like salmon fishing? The province of New Brunswick will auction off 68 10-year angling leases along the Restigouche River in March. They're expensive—from a \$9,000 top down to around \$500 yearly.

Alberta Wants Others To Share in Its Growth

Getting others to share in it is one project that the province of Alberta is pushing for its developing mineral wealth and industrial expansion.

A task force headed by John E. Oberholtzer, provincial deputy minister of industry and labor, flew down to Los Angeles last week to talk up Alberta to businessmen there. He wants them to look on the prairie province as a future market, perhaps as a spot for a branch plant.

Oberholtzer was frank with the Angelenos. He told them that present markets in Alberta were limited by sparse population (about 937,000). Wholesale sales run to only \$500-million yearly. But he urged the business people to get in on the ground floor. "Population can't help but follow industry into Alberta; the province is ripe for expansion," he said. He promised the province's help in getting new industries started, said there was a good labor supply. As a capper, Oberholtzer plugged Alberta's tremendous power resources in oil (page 102), natural gas, and coal.

Though farming is still Alberta's economic mainstay, industry is gaining fast. Authorized capitalization of new companies increased 60% in 1950, 50% last year.

As Oberholtzer made his pitch, an aide passed around a copy of the Edmonton Journal prophesying a billion-dollar expansion in Alberta and the Northwest Territories. A new railway link between Great Slave Lake in the north and Edmonton, and the treatment of uranium at Edmonton, were two schemes mentioned.

Actually, some heavyweight industrial projects are already in the works—all in the Edmonton area. Canadian Chemical Co., Ltd., is working on a \$53-million cellulose acetate plant; Canadian Industries, Ltd., plans a \$13-million plastics plant.



HOW TO SAVE THE TIME OF YOUR TOP EXECUTIVES

Lighten executive loads—including your own! How? By focussing the specialized help of EBASCO engineers, constructors and business consultants on your most troublesome, time-consuming business problems. EBASCO helps solve such problems efficiently and economically . . . without adding permanently to company payrolls or disturbing existing company relationships.

Perhaps yours is a sales and marketing

problem. EBASCO has planned many such programs in a wide variety of fields. EBASCO has developed insurance and pension plans; handled appraisals; planned and built over one billion dollars worth of new plants; solved financing and production problems; planned effective personnel programs. EBASCO has been serving business and industry throughout the world for nearly 50 years. EBASCO will do all or any part of a job, for companies large and small.

To find out exactly how we can serve you best, write for your copy of "The Inside Story of Outside Help."
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MANAGEMENT



PRESIDENT MITCHELL: "I agree that doing without the executive vice-president would remove one level of management—it would be me. I'd be dead."



PRESIDENT KEITH: "I try to do all my office work between 8 o'clock and 9:30."



PRESIDENT PENDLETON: "The most important decision is how to divide the 24 hours in a day."



PRESIDENT CLARY: "I can describe my experience with paper work in two words—judicious neglect."



PRESIDENT ATWOOD: "We budget by contract, by departments. We revise constantly. It's tough."

Top Men Take a Look at Their Jobs

Last week five company presidents took up the scalpel and dissected their jobs for about 1,000 top management men attending the American Management Association's midwinter conference in Los Angeles.

When they got through, they found themselves agreeing on what the important jobs of a president are. But they were often miles apart on how to get the jobs done.

The five-man panel agreed that:

- There are as many ways to or-

ganize a president's job as there are companies.

• The only things presidents have in common are problems.

• A president gets paid so much, not because he is so much smarter, but because he faces those problems, takes the responsibility, and wields the authority.

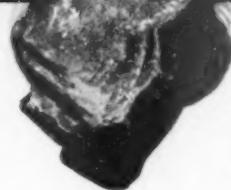
The five participants: Don G. Mitchell, Sylvania Electric Products, Inc., New York, chairman of the group; J. L. Atwood, North American Avia-

tion, Inc., Los Angeles; Morris B. Pendleton, Plumb Tool Co., Los Angeles; Hugh L. Clary, Clary Multiplier Corp., San Gabriel, Calif.; Willard W. Keith, Cosgrove & Co., Inc., Los Angeles.

Here's a blow-by-blow account of these executives' answers to questions put to them by the audience:

I—How Do You Divide Up the Work?

Keith: Our company is a national insurance brokerage house. Our work being personal service seems to go well



SCALP TREATMENT FOR BIG BOULDERS

Heavy-duty "scalping" . . . the quick processing of rock and ore to segregate extra-heavy, over-sized material . . . had long posed a problem to the handlers of bulk materials in the metal, aggregate and construction fields.

Faster, cleaner scalping was needed. Existing equipment either processed the material too slowly or wouldn't separate it efficiently. The obvious answer to the problem was to fast-feed the rock or ore across a heavy-duty vibrating scalper.

Building the first scalper that would bounce big boulders without causing a

minor earthquake was a natural job for Hewitt-Robins. Our knowledge and experience in designing and constructing heavy-duty vibrating machinery provided the necessary answers.

Today, 9,000-pound boulders are being scalped at the rate of 1,100 tons an hour on a Hewitt-Robins Heavy-Duty Scalper . . . with so little vibration transmitted from the "live" frame that a nickel can be balanced on the scalper base!

Whether you're engaged in scalping or otherwise processing any bulk material, you will find Hewitt-Robins has the right machinery for your job.



Secret of the Heavy-Duty Scalper's smooth performance is the set of vibration-absorbing coil springs on which the "live" frame is mounted.

HEWITT  **ROBINS**

Executive Offices: 370 Lexington Avenue, New York 17, N. Y.

HEWITT RUBBER DIVISION: Belting, hose and other industrial rubber products
ROBINS CONVEYORS DIVISION: Conveying, screening, sizing, processing and dewatering machinery
ROBINS ENGINEERS DIVISION: Designing and engineering of materials handling systems
HEWITT RESTFOAM DIVISION: Restfoam® mattresses, pillows and comfort-cushioning

Hewitt-Robins is participating in the management and financing of Kentucky Synthetic Rubber Corporation

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- OPEN HEARTH FURNACE EQUIPMENT
- AUTOMATIC FIRE PROTECTION SYSTEMS
- CHEMICAL & FOOD PROCESSING EQUIPMENT
- CONCRETE & ASPHALT ROAD PAVING MACHINERY
- COMPLETE CHEMICAL & INDUSTRIAL PLANTS
- RADIO, TELEVISION & TRANSMISSION TOWERS
- HEAVY STEEL CASTINGS
- HEAT & CORROSION RESISTING ALLOY CASTINGS
- STEEL FORMS FOR CONCRETE CONSTRUCTION
- CONTRACTORS EQUIPMENT
- CLAMSHELL BUCKETS
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- LEWIS FOUNDRY & MACHINE
- NATIONAL ALLOY STEEL
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*Operates as a division of Blaw-Knox Construction Company
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Export Department, 342 Madison Ave., New York 17, New York.
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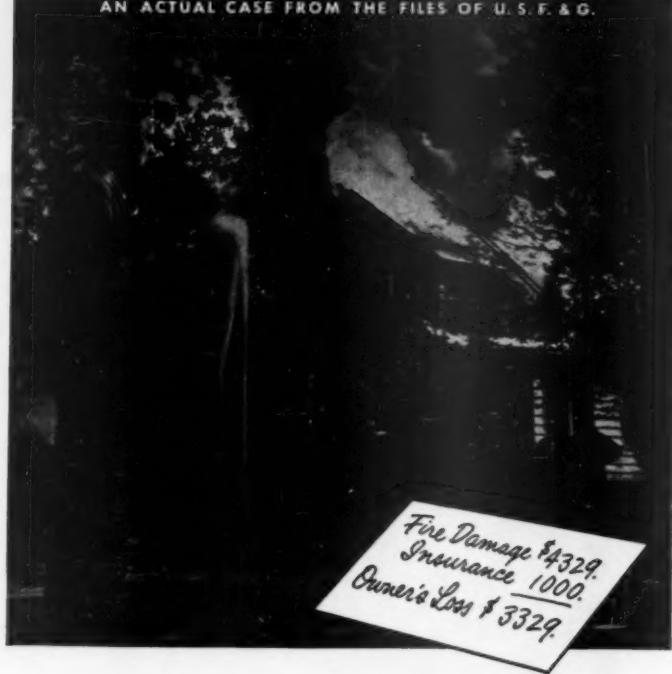
Buyers and engineers for many basic industries come direct to "Blaw-Knox Street" for their equipment, plans and consultations. No need to shop around if requirements fall within the broad range of Blaw-Knox Engineered Products and Engineering Services — and "Blaw-Knox Street" is by far the shortest route to profitable operation.

BLAW-KNOX

COMPANY

A Pacemaker for American Initiative and Ingenuity

AN ACTUAL CASE FROM THE FILES OF U.S.F.&G.



The "Penny-wise" Homeowner who wouldn't listen

In 1947 a homeowner purchased a five year fire insurance policy in the amount of \$1,000 on his \$8,000 home. He said he had never had a fire . . . and never would have!

The agent urged him to take a policy more in line with the actual replacement value of his property. But the owner wouldn't LISTEN! He preferred to gamble with fire.

Four years later fire broke out, causing damage estimated at \$4,329. U.S.F. & G. promptly paid the full amount of the policy . . . but the owner was insured for *only* \$1,000. The "penny-wise" homeowner had saved a few pennies on premiums but lost \$3,329.

• • •
Your local agent is constantly ready to serve you. Consult him as you would your doctor or lawyer. For the name of your nearest U.S.F. & G. agent, or for claim service in an emergency, call Western Union by number and ask for Operator 25.



U.S.F.&G.

CASUALTY
FIDELITY-SURETY
FIRE

United States Fidelity & Guaranty Company, Baltimore 3, Md.
Fidelity Insurance Company of Canada, Toronto

limits them. We let them write their own job descriptions by setting forth the objectives they hope to accomplish.

Atwood: We have organization charts top to bottom. They're skeletonized in job descriptions except in the lower levels.

Mitchell: We paint all jobs in broad brush, using enough detail to differentiate. These jobs are also bracketed for minimum-maximum salaries—and maybe you don't think this was a big help when controls came along.

V—How do you communicate with your employees?

Atwood: We have a management club organization. I try to attend every meeting. We started a new device two years ago. Every Tuesday morning assorted supervisors meet for an hour or so to review our program. We can give them a lot of confidential stuff that could not be disclosed to everybody.

Pendleton: Next to figuring how to divide his time, a president finds communications his most important task. This recognition by the company is as important as compensation. The employees may not agree with us, but they want to know. And they're quick to sense whether you really want good communications.

VI—How do you set company goals, but not your budget?

Clary: Statistics help. For example, we have figures on every county in the United States telling us the potential for office machines.

Atwood: We can't budget on a calendar basis. We are a defense contractor, and the government can cut contracts suddenly. We budget by contracts, by departments. We revise constantly. It's tough.

Mitchell: All our production managers and controllers meet every three months. We review the last 12 months against the budget, take a look at the next 12. Once the budget is presented, we never revise. But we're amazed how closely performance matches the budget. In 1951 we budgeted for sales of \$197-million. The actual figure was \$202-million.

VII—What about recruiting, training, salaries, incentive?

Pendleton: I'll say recruiting and incentive are the third chief responsibility of the company president. We're strong on incentive. Factory people work on weekly incentive, foremen on monthly. And 40 executives are awarded annually. Everybody gets in on profit-sharing.

Mitchell: We shy away from formal training programs. We'll pull a man out of a department no matter how good he is there if he wants a crack at something else.



You'd wait a long time for this daily train to pass!

Every day this nation's cross country gas pipe lines deliver about 19 billion cubic feet of natural gas. That is equivalent in heat energy to a coal train 20 thousand cars long! Imagine!

This gives you an idea of how our industry and homes depend on gas . . . and on its amazing network of coast-to-coast pipe lines that today comprise one of America's major fuel distribution systems. Still, we're not delivering nearly enough gas to do all the important jobs for which this low-cost fuel is so critically needed.

Recognizing this, the men who head up America's over-all pattern of defense production are clearing the way for expanded pipe line facilities—new lines, increased capacities, and the additional power needed to push the fuel from the producing fields to wherever it will do the most good!

Ever since the start of the gas industry, Cooper-Bessemer has specialized in building the huge gas en-

gines that power the hundreds of pipe line compressor stations. Today we're building them at a greater rate than ever before . . . better than ever before because of the new ideas constantly being worked out and applied by one of America's oldest engine builders.

The
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DIESELS • GAS ENGINES • GAS DIESELS • ENGINE-DRIVEN AND MOTOR-DRIVEN COMPRESSORS • HIGH PRESSURE LIQUID PUMPS



HENRY H. REICHOLD, the man who grossed Reichhold Chemicals' \$100-million last year, doesn't answer to anyone. He . . .



LISTENS to his top executives . . .



ARGUES with them at board meetings . . .



TELLS them his decisions. That's how . . .

He Owns a Chemical Empire—and Runs It

Aside from Detroit and the chemical industry, not many people know much about Reichhold Chemicals, Inc., or about Henry H. Reichhold, 50-year-old owner of "the world's largest producer of synthetic resins."

Next week that's going to be changed. On Sunday night RCI begins its first big nationwide institutional advertising campaign. It will sponsor (for at least 13 weeks) the television debut of radio's Town Meeting of the Air on an eight-city coast-to-coast hookup over ABC. Estimated cost for the 13-week contract: \$200,-

000. RCI is plugging the program in just about every periodical in the U.S.

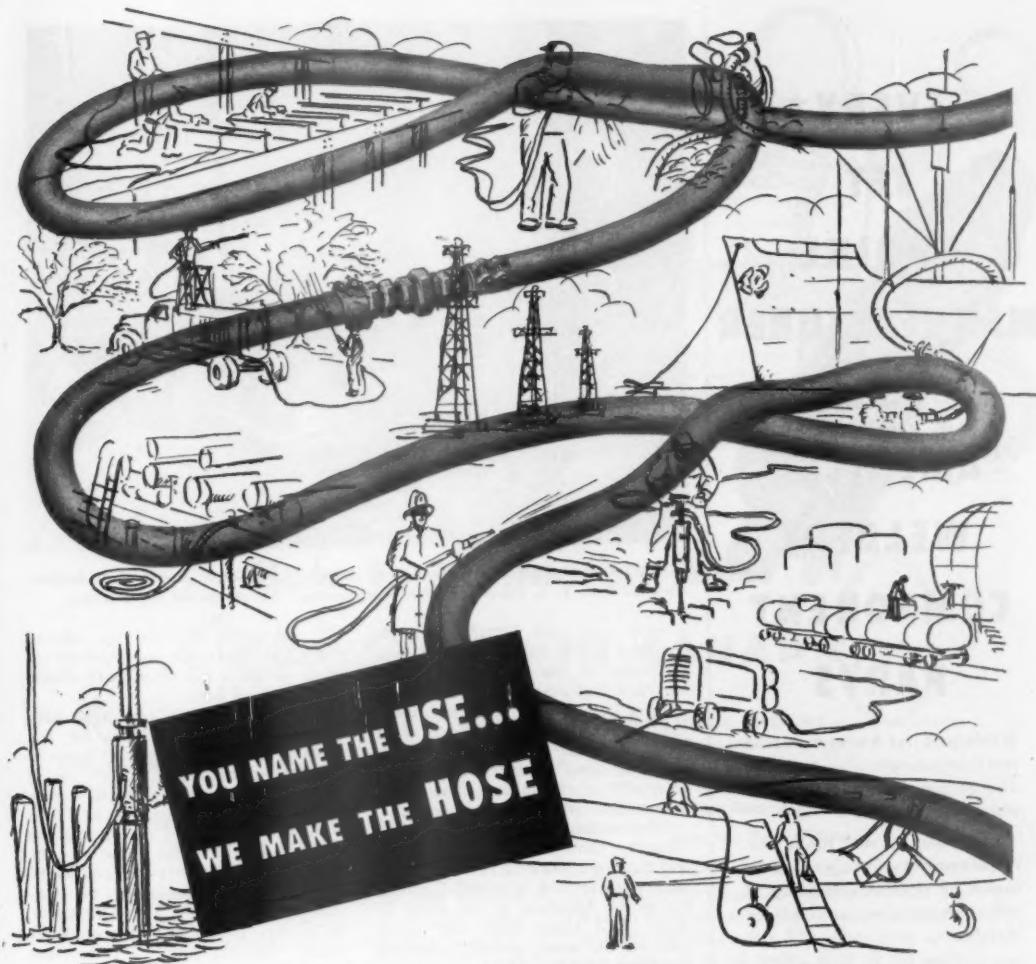
For the record, Reichhold Chemicals is down as sponsor. But like everything else that happens at RCI, it will be Henry H. Reichhold, chairman of the board, who puts up the money. That's because Reichhold owns the company outright. When RCI spends a dollar, it's Henry's dollar. When it earns a buck, that's Henry's, too.

• **Big Business**—Reichhold probably can lay claim to being the biggest one-man company in the U.S., if not the world. Last year RCI netted be-

tween \$3-million and \$5-million. Within five years that should hit somewhere between \$74-million to \$124-million, if current guesses hold up.

Last year's sales, Reichhold estimates, were \$100-million and will jump to \$150-million in 1952, \$250-million within three to five years. It's a safe bet that no single-ownership company in the country comes close to that size. Most big privately held corporations like Ford Motor Co. are split up in family ownership.

But Reichhold, anytime he wants to, can go to a strong box tucked in



Our Condor Homoflex Hose is an example . . . Raybestos-Manhattan engineers found a way to build strength into a hose-wall without simply adding weight and thickness in more plies. The result, this Hose is flexible as a rope . . . and a real labor saver wherever men must constantly work with hose. On the other hand, Raybestos-Manhattan makes the world's *largest* and *heaviest* hose for oil drilling and loading, and for suction. Hose may not be your problem today, but whenever you think of industrial rubber products . . . transmission, conveyor, V-belts, or hose . . . remember R/M engineers have developed exclusive features to give you more for your money in every use. Consult your R/M representative.



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Welding is our business . . . 33 years' experience . . . complete designing, engineering and metallurgical service.

This is what we offer you if your requirements involve either fusion or resistance welding of either ferrous or non-ferrous metals.

Drop a line to our Product Development Division for our new illustrated catalog which will give you a look at our plant, facilities, and what we do.

United States



The
AMERICAN WELDING
& MANUFACTURING CO.

380 DIETZ ROAD
WARREN, OHIO



BOARD is hand-picked by Reichhold. Left to right: E. A. Terray, exports; P. L. Swisher, sales; the boss; T. K. Haven, executive vice-president. Six others also are directors.

a bank vault and literally hold the company in his hands: a single stock certificate in his name ("I haven't looked at that piece of paper in years").

As a businessman he is responsible only to himself and the Bureau of Internal Revenue. To make his annual report, he says, "All I have to do is talk to myself in the mirror. The figures just confirm what I already know."

• **Mushrooming Plants**—Reichhold's company owns nine domestic plants and the lion's share of 12 foreign affiliates, not counting a second Canadian factory in Montreal to be ready by April. RCI makes resins and chemicals for the paint, printing, plywood, furniture, foundry, textile, and paper industries. On top of that, it is moving into copolymer resins, the kind that end up as molded plastics. The company just bought an English copolymer producer, plans to expand rapidly in that field.

If you ask Reichhold how many plants his company operates, he has to turn to an aide: "How many is it now?" That isn't because he doesn't know what is going on; it's simply that postwar expansion here and abroad has left Reichhold little time to sit down and count what he owns. The answer is likely to change one day to the next.

• **Tight Rein**—Reichhold runs the company from its new headquarters in Rockefeller Center. From there he calls South Africa or maybe Buenos Aires and meets with a steady stream of executives who fly in from Seattle, Tuscaloosa, Ala., Detroit, or Naples.

He makes about three trips abroad every year, flies from one plant to another so often his office can't always keep track of him.

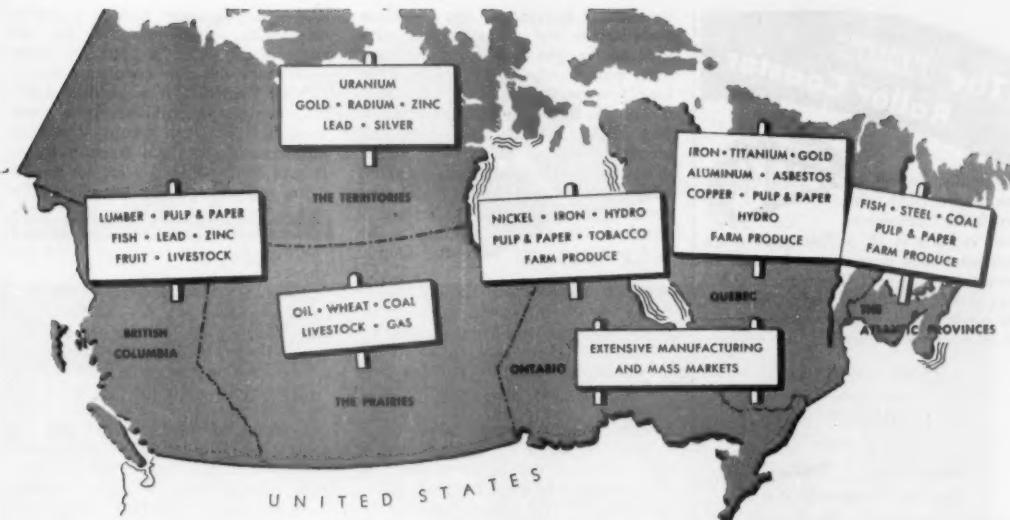
His operating men can argue with the boss, but the decisions are his. Nothing of any importance happens without Reichhold's O. K. ("I do all the pricing," he says). When a new plant is being considered, it is Reichhold who flies to the site, makes the deal, brings back the papers to be checked by his lawyers or accountants.

This kind of operation fits the character of Reichhold to a T. Outwardly, he is shy. He talks of his company being "one big family." (Few have ever left his employ.) When he mentions RCI, he automatically says "we." But in his case, it is strictly an editorial "we."

• **Impresario**—Reichhold was born in Berlin. He still has the soft, sibilant Viennese accent picked up at the University of Vienna and in his father's resin plant in that city. He came to America as a young chemical graduate, worked for Henry Ford as head of the paint department before striking out on his own in 1925. First he distributed his father's synthetic resins, later got into production by obtaining patent rights from Europe. Until 1938 his company was called Beck, Koller & Co.—the name of one of his father's companies.

Today anyone could mistake Reichhold for a continental impresario. They wouldn't be far wrong. Music is dear to him.

For six years he poured money into



How to Make the Most of Opportunity IN CANADA...



SEEKING new sources of supply?—
New plant sites?—New markets?
... Look at the signs of opportunity
all over this map of Canada:—

NATURAL RESOURCES—enormous developments in iron ore and oil; a treasure house of asbestos, coal, gold, uranium and other minerals.

INDUSTRY—gross national product and value of manufactures more than tripled in a decade; world leader in the production of newsprint, asbestos, nickel.

MARKETS—“Uncle Sam’s best customer”; 8 million consumers in Quebec and Ontario alone, concentrated near the U.S. border.

POWER—low-cost hydro-electric power development second only to the U.S.

“MY BANK”



AGRICULTURE, FISHING, LIVESTOCK—a prosperous, well-balanced, “good-to-live-in—good-to-work-in” land.

Canada's First Bank Interprets Canada from Your Point of View

Established in the U.S. in 1859, the Bank of Montreal has studied Canadian opportunity from the American businessman's point of view for almost a century. With more than 570 offices from coast to coast, the B of M knows each of Canada's regions intimately... can give on-the-spot answers to your questions on materials or markets, plant sites or finance. Send your inquiry today—your letter will be fully and promptly dealt with. Write to any of our U.S. offices or to the Business Development Department, Bank of Montreal, Place d'Armes, Montreal, Canada.

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Canada's First Bank Coast-to-Coast

New York ... 64 Wall Street Chicago ... 27 S. La Salle Street San Francisco ... 333 California Street

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... 100-page, fact-filled guide
to a dynamic, expanding Canada, pub-
lished by the B of M. Send today for your
copy of this well-illustrated introduction
to the go-ahead neighbors up north.



The FIRST Roller Coaster



Originally known as the Switchback, the first Roller Coaster was built in Paris in 1816. The crude originals were soon discontinued because of numerous fatalities. However, in 1880 they were again introduced in Paris and the United States simultaneously—and have since been enjoyed by millions.

JERVIS B. WEBB CO.

was the

FIRST
to develop

Horizontal Roller Curve Assemblies



Typical Webb Horizontal Roller Curve Assembly

The Webb Roller Curve is the most economical, serviceable and satisfactory unit for carrying an overhead conveyor chain around a horizontal curve. Chain and trolleys are held in the correct vertical position by ball bearing rollers which reduce both friction and wear to a minimum. Roller Curves are made in various radii and arcs for varying needs. Rollers are mounted between two segment bars.

The Working Part Of A Roller Curve Is The Roller

Rollers used in Webb Roller Curves are specially designed and built for the service. Available for two types of lubrication . . . oil hole in cover and grease fitting in drilled center pin. In either case, the Roller Curve is assembled so as to make lubrication easy. The design of the Roller Curve is such that the rollers are readily replaceable without dismantling.



the Detroit Symphony. His \$4-million contribution was welcome, but other sponsors thought he had too much say. They pulled out. So did he, in 1949. Last year he left Detroit altogether, moved his family and headquarters to New York. Charles J. O'Connor, president, will stay in Detroit.

Since he dropped the symphony business, Reichhold spends all his time running RCI (his only recreation is tennis). The Town Meeting is his first public splurge since the Detroit hassle.

• **Quick Decisions**—Reichhold has a board of directors made up of regional general managers and staff vice-presidents. They meet regularly, approve decisions that more often than not have already been made by telephone.

The company operates about as informally as a corner drugstore. If you call RCI headquarters in New York, Henry himself is likely to answer the phone. (That's one reason he became chairman—"not many people want to talk to the chairman; they want the president. It spares me a lot of time.")

Reichhold says the "first \$10-million was the hardest." After that success fed on itself: "Once you get big, it isn't hard to get bigger." He admits he was lucky to get into an industry as fast-growing as synthetic resins.

• **Fast, Good Work**—More than anything, though, Reichhold thinks it was the freewheeling nature of one-man ownership that put him out in front and kept him there. "Our competitors just can't move fast enough," he says.

Take the current decentralization program: "We want to put plants, little ones, near the customers. Probably, we'll cut the phenol plant in Alabama in half, move part of it to Oregon. There'll be a Houston plant, too. When we finish, we want plants scattered around like Howard Johnson restaurants."

It takes one meeting—or a phone call—to make decisions so far-reaching. Right after the Korean War started, Reichhold decided on a new plant in Detroit, another in Charlotte. The morning after the decisions were made, agents were in the steel mills. Three months later they would have been frozen out of building supplies. The Detroit plant cost \$1-million. Competitors, says Reichhold, would have spent \$10-million, taken a year to build it. RCI did it in six months.

• **Public Ownership**?—He admits public ownership has advantages, especially in getting money to expand. But so far he's had little trouble: Profits, short- and long-term bank loans, a few privately sold preferred stocks have been enough.

Like other singly owned companies,

RCI some day may become a public corporation. Reichhold and his advisers admit that. A start has been made with the new copolymer operation in England. It is publicly held. All other foreign affiliates have some stock held by small groups of foreign businessmen, but RCI controls them. It gets dividends and a fee for patent rights and management knowhow. By making contracts with foreign governments, RCI gets a free hand in each country plus a guarantee of dollar exchange.

His new Montreal plant is another departure. RCI gets 50% of the stock; about 10 key RCI executives get the rest. They can expect a handsome capital gain within a few years. That will be the pattern for any new ventures of this kind.

• **Looking Ahead**—For Reichhold the biggest problem today is a personal one. Ever since he turned 50 he's been hunting ways to protect himself from the big tax bite that would chew up a personal industrial empire like his if something happened to the owner. Most likely solution: a non-profit foundation. Plans for it already in the works.

With a touch of regret in his voice, Reichhold says: "You know, we always put off making plans for the time when I'm gone. First it was \$50-million, then I said we'd wait till we reached \$100-million. Now I guess it'll be \$250-million."

MANAGEMENT BRIEFS

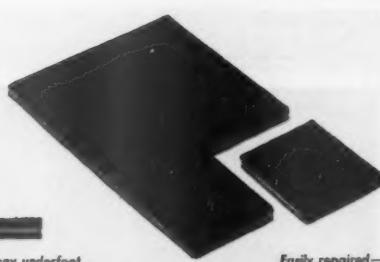
Aid to education: Standard Oil Co. of Ohio is the latest company to contribute to the Ohio Foundation of Independent Colleges (BW-Jan.12'51,p 66). Its gift: \$35,000, the largest to date. Cooper-Bessemer Corp. and Firestone Tire & Rubber Co. each gave \$25,000. The foundation's immediate goal: \$1-million.

Nestle Co., Inc., will move its national headquarters this June from Colorado Springs, Colo., to White Plains in Westchester County, N. Y. Main offices have been in Colorado since October, 1950. Prior to that they were in New York City.

An "operating board" made up of division heads has been organized at Behr-Manning Corp., part of the Norton Co., in upstate New York. The group will make (1) all decisions on plantwide operations and (2) recommendations to the company board on general policy. The idea: to shift operating responsibility out of the hands of staff executives.



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1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23-24-25-26-27-28-29-30-31-32-33-34-35-36-37-38-39-40-41-42-43-44-45-46-47-48-49-50-51-52-53-54-55-56-57-58-59-60-61-62-63-64-65-66-67-68-69-70-71-72-73-74-75-76-77-78-79-80-81-82-83-84-85-86-87-88-89-90-91-92-93-94-95-96-97-98-99-100-101-102-103-104-105-106-107-108-109-110-111-112-113-114-115-116-117-118-119-120-121-122-123-124-125-126-127-128-129-130-131-132-133-134-135-136-137-138-139-140-141-142-143-144-145-146-147-148-149-150-151-152-153-154-155-156-157-158-159-160-161-162-163-164-165-166-167-168-169-170-171-172-173-174-175-176-177-178-179-180-181-182-183-184-185-186-187-188-189-190-191-192-193-194-195-196-197-198-199-200-201-202-203-204-205-206-207-208-209-210-211-212-213-214-215-216-217-218-219-220-221-222-223-224-225-226-227-228-229-230-231-232-233-234-235-236-237-238-239-240-241-242-243-244-245-246-247-248-249-250-251-252-253-254-255-256-257-258-259-260-261-262-263-264-265-266-267-268-269-270-271-272-273-274-275-276-277-278-279-280-281-282-283-284-285-286-287-288-289-290-291-292-293-294-295-296-297-298-299-299-300-301-302-303-304-305-306-307-308-309-3010-3011-3012-3013-3014-3015-3016-3017-3018-3019-3020-3021-3022-3023-3024-3025-3026-3027-3028-3029-3030-3031-3032-3033-3034-3035-3036-3037-3038-3039-3040-3041-3042-3043-3044-3045-3046-3047-3048-3049-3050-3051-3052-3053-3054-3055-3056-3057-3058-3059-3060-3061-3062-3063-3064-3065-3066-3067-3068-3069-3070-3071-3072-3073-3074-3075-3076-3077-3078-3079-3080-3081-3082-3083-3084-3085-3086-3087-3088-3089-3090-3091-3092-3093-3094-3095-3096-3097-3098-3099-30100-30101-30102-30103-30104-30105-30106-30107-30108-30109-30110-30111-30112-30113-30114-30115-30116-30117-30118-30119-30120-30121-30122-30123-30124-30125-30126-30127-30128-30129-30130-30131-30132-30133-30134-30135-30136-30137-30138-30139-30140-30141-30142-30143-30144-30145-30146-30147-30148-30149-30150-30151-30152-30153-30154-30155-30156-30157-30158-30159-30160-30161-30162-30163-30164-30165-30166-30167-30168-30169-30170-30171-30172-30173-30174-30175-30176-30177-30178-30179-30180-30181-30182-30183-30184-30185-30186-30187-30188-30189-30190-30191-30192-30193-30194-30195-30196-30197-30198-30199-30199-30200-30201-30202-30203-30204-30205-30206-30207-30208-30209-302010-302011-302012-302013-302014-302015-302016-302017-302018-302019-302020-302021-302022-302023-302024-302025-302026-302027-302028-302029-302030-302031-302032-302033-302034-302035-302036-302037-302038-302039-302040-302041-302042-302043-302044-302045-302046-302047-302048-302049-302050-302051-302052-302053-302054-302055-302056-302057-302058-302059-302060-302061-302062-302063-302064-302065-302066-302067-302068-302069-302070-302071-302072-302073-302074-302075-302076-302077-302078-302079-302080-302081-302082-302083-302084-302085-302086-302087-302088-302089-302090-302091-302092-302093-302094-302095-302096-302097-302098-302099-302099-302100-302101-302102-302103-302104-302105-302106-302107-302108-302109-302110-302111-302112-302113-302114-302115-302116-302117-302118-302119-302120-302121-302122-302123-302124-302125-302126-302127-302128-302129-302130-302131-302132-302133-302134-302135-302136-302137-302138-302139-302140-302141-302142-302143-302144-302145-302146-302147-302148-302149-302150-302151-302152-302153-302154-302155-302156-302157-302158-302159-302160-302161-302162-302163-302164-302165-302166-302167-302168-302169-302170-302171-302172-302173-302174-302175-302176-302177-302178-302179-302180-302181-302182-302183-302184-302185-302186-302187-302188-302189-302190-302191-302192-302193-302194-302195-302196-302197-302198-302199-302199-302200-302201-302202-302203-302204-302205-302206-302207-302208-302209-302210-302211-302212-302213-302214-302215-302216-302217-302218-302219-302220-302221-302222-302223-302224-302225-302226-302227-302228-302229-302230-302231-302232-302233-302234-302235-302236-302237-302238-302239-302240-302241-302242-302243-302244-302245-302246-302247-302248-302249-302250-302251-302252-302253-302254-302255-302256-302257-302258-302259-302260-302261-302262-302263-302264-302265-302266-302267-302268-302269-302270-302271-302272-302273-302274-302275-302276-302277-302278-302279-302280-302281-302282-302283-302284-302285-302286-302287-302288-302289-302290-302291-302292-302293-302294-302295-302296-302297-302298-302299-302299-302300-302301-302302-302303-302304-302305-302306-302307-302308-302309-302310-302311-302312-302313-302314-302315-302316-302317-302318-302319-302320-302321-302322-302323-302324-302325-302326-302327-302328-302329-302330-302331-302332-302333-302334-302335-302336-302337-302338-302339-302340-302341-302342-302343-302344-302345-302346-302347-302348-302349-302350-302351-302352-302353-302354-302355-302356-302357-302358-302359-302360-302361-302362-302363-302364-302365-302366-302367-302368-302369-302370-302371-302372-302373-302374-302375-302376-302377-302378-302379-302380-302381-302382-302383-302384-302385-302386-302387-302388-302389-302390-302391-302392-302393-302394-302395-302396-302397-302398-302399-3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Danger spots are easy to avoid or eliminate — once they are located and marked . . . even the minute defects and invisible cracks in vital machinery that might cause serious and costly accidents. But how to find them — how to see them, even if below the surface?

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Ahead to Ample Supplies

centrates will be taking the pressure off the Minnesota, Wisconsin, and Michigan high-grade ores.

They're also counting on the seemingly miraculous ability of iron mine operators to stretch the productive life of mines far beyond their estimated span. The industry is counting on this uncanny talent for taking out masses of ore from "exhausted" mines. Underground mines, particularly, should profit from this extension of life; in 1951 they produced something like 20-million tons of the 97-million total.

With expansion of underground mining and with a few open pits still producing in 1972, iron men don't think they're overboard in counting on 30-million tons from the Superior iron ranges, quite a bit of it in wash ore. Their figure, though, includes Steep Rock, nearby in Canada, as part of the Lake Superior area.

• **Foreign Ores**—Imports will come mostly from Labrador and Venezuela, with a trickle from West Africa and other parts of the world.

The Hanna-Hollinger holdings in the Quebec-Labrador area (BW—Aug. 11'51, p102) should start producing in 1954. Experts think shipments will reach 10-million tons a year by 1956 and hit 20-million tons a year by 1972. The natural content of this ore runs well above that of Lake Superior base ore.

On the strength of presently known deposits, Venezuela (BW—Mar. 31'51, p115) is expected to be turning out 20-million tons of ore each year by 1972 for use of U.S. mills. And from West Africa (BW—Jun. 30'51, p24), Republic

Steel will continue indefinitely to receive about 1-million tons of premium rock ore each year. Other foreign sources should yield the remaining 4-million tons to bring imports to the 45-million mark.

II. Low-Grade Ores

The industry's real trump card promises to be the beneficiation of almost inexhaustible supplies of magnetic and nonmagnetic taconite and jasper in the upper lakes area.

• **Plants Under Way**—Erie Mining Co. has been operating an oversized pilot plant for a couple of years (BW—Oct. 15'49, p25) and is about ready to go ahead with full-scale taconite beneficiation.

Reserve Mining Co. is now building a plant to beneficiate magnetic taconite (BW—Dec. 29'51, p28). Methods of beneficiating this ore have been known for more than 25 years. In fact, Reserve Mining is utilizing some of the same buildings at Babbitt, Minn., where the Mesabi Iron Co. successfully beneficiated magnetic taconite more than 20 years ago. Besides operating the Babbitt plant, Reserve Mining Co. plans to build a larger mill at Beaver Bay.

U. S. Steel Corp., leader of the industry, is completing a sintering plant at Iron Mountain, Minn. (BW—Dec. 29 '51, p28), and will soon build a pilot plant nearby for beneficiation of taconite. Big Steel has less need for haste in this direction than other companies, since its reserves of all types of ore in the Lake Superior region far surpass

"Definitely cuts costs on landfill garbage disposal"



report cities using D Tournapull

In keeping with the trend towards public works improvements, many cities are turning to the landfill method of garbage disposal. This method uses either the modern rubber-tired Tournadozer or the high-speed D Roadster Tournapull, illustrated here. Working separately or in pairs, both LeTourneau units combine dirtmoving and snow removal versatility to speed all types of city maintenance work in combination with the garbage service.

The city of El Paso, Texas, a typical user, added an interchangeable dozer blade to their D Roadster and put it to work as an all-purpose city utility tool. At their garbage disposal dump, "D" pushes truck-dumped garbage into place, then self-loads dirt and spreads it to cover. Big 18.00 x 25 low-pressure tires compact the refuse and its covering blanket during normal travel over fill. In an average day, the Tournapull covers 785 cu. yds. of garbage with 120 yds. of dirt. And, according to Ed Muckelroy, Supt. of Sanitation, "Comparing unit with crawler-tractor, same amount of material can be covered in half the time. Unit definitely cuts costs of landfill garbage disposal."

Drives anywhere at 28 m.p.h.

Fast-moving D Roadster makes profitable use of idle time. It is always ready to drive away at a moment's notice . . . goes anywhere at 28 m.p.h. to handle scattered assignments. Maintains alleys . . . hauls, grades, spreads cinders and gravel surfacing . . . plows and hauls snow and ice from city streets.

Perhaps your municipality or county can improve taxpayer service with this versatile one-man dirtmover and snow plow. If you supervise sanitation or road maintenance service, get all the facts on D Roadster Tournapull. Write for the name of your nearest LeTourneau Distributor.



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Peoria, Illinois

Tournapull—Tournadozer—Trademark Reg. U. S. Pat. Off. 4417-52



"... The price rise by 1972 would add approximately \$15 a ton to the cost of finished steel . . ."

RESOURCES starts on p. 124

those of any other company. However, these holdings are being depleted unduly fast by the company's policy of sharing ore with less fortunate firms.

• **No Scarcity**—It is estimated that the Mesabi area contains 500-million tons of magnetic taconite. Yet the supply of magnetic taconite and jasper is dwarfed by the almost limitless abundance of nonmagnetic lean iron rock. That's why the discovery of a satisfactory method of extracting the nonmagnetic iron means so much to the industry.

The industry can't lay its hands on the secrets of the method worked out by Cleveland Cliffs Iron Co. and Ford Motor Co., but it feels that the plan must have proved itself. At least, construction of the mill is already under way (BW-Nov. 24 '51, p21).

Mining engineers generally agree that the yield of beneficiated low-grade ores will be limited only by the needs for capital to build the processing plants. Capital cost is now estimated at \$15 to \$20 per ton of annual capacity—that covers both the mine and the beneficiating plant.

III. Prices Slant Upward

While the iron ore soothsayers see the raw materials ready in 1972 as they are needed, they also see a continued trend toward higher prices for the ore.

From 1923 to 1946 the price of 51.5% non-Bessemer Mesabi ore ranged between \$4.25 and \$4.95 a ton. Since 1946, it has climbed steadily to its present level of \$8.30 a ton, rail-side of the ship at a Lake Erie port. The increase since 1946 has averaged more than 50¢ a year.

• **Reflects Higher Costs**—The industry sees nothing in the future that would ever bring the ore price down. All signs point the other direction.

The cream of the Mesabi crop, the ores reached and shipped most easily, has been skimmed off. Mining operations threaten to get more expensive, both for labor and for equipment. Then, too, transportation costs are increasing each year, and the value of the dollar is dwindling.

The present base price of the 51.5% ore, \$8.30 a ton, figures out to a unit value of a trifle over 16¢. Even figuring that the upswing may be interrupted for two or three years or yet longer, ore men think that the price

will touch \$15 a ton by 1972. That would be a unit value of approximately 29¢.

Such a unit value 20 years from now would be competitive with imported ore prices, the experts say, and would provide enough cushion for the extra costs of beneficiating domestic taconite and jasper. The price rise by 1972 would add approximately \$15 a ton to the cost of finished steel.

IV. Improved Technique

The crystal gazers don't stop at iron ore production as a subject for their prophecies. They are sure that the coming of the concentrates will lead to radical changes in the way the stuff is used.

Definitely in the picture of years to come, they agree, is the direct reduction of iron ore concentrate into steel by some type of electric furnace. Such a method would combine the functions of the blast furnace and the open hearth. It would bypass costly manufacturing steps and end all worry about the growing shortage of suitable coal for coking.

• **Power Problem**—The process would take a lot of electric power, and the power would have to be cheap. You'd have to be able to count on juice at no more than two or three mills per kWh. It's fantastic now, but the industry's prophets are staring 20 years into the future.

They're thinking of such factors as the improvements made recently in boilers of electric utility companies, to enable the steam plants to get efficient use out of inferior grades of coal. By present methods, it takes a ton of good-quality coal to produce ultimately a ton of steel.

A present-day electric furnace needs about 500 kWh. to produce a ton of steel from scrap. But one ton of very ordinary coal, used in the boiler of a modern electric generating plant, will produce about 2,000 kWh.

That's about as far as thinking goes in the industry right now, but it's enough to hint at the changes that may lie ahead.

• **Same Old Stand**—Whatever the technical turn that may be taken, the trade is pretty sure the iron and steel industry has escaped the once-potent threat of having to pull up its roots in the Great Lakes region.

With ample ore now in sight in their 20-year view ahead, Cleveland companies are confident of staying right where they are. There seems no reason either for other companies in the lakes region to move. Mills will be built, of course, outside the present iron and steel area, but it won't be caused by an impending ore famine on the Great Lakes.

Flintkote
INDUSTRIAL PRODUCTS
Digest

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COMMODITIES

Boost for Lagging Newsprint

Demand has soared, but in the U.S. there's been no new plant to satisfy it. Now the government is helping out with quick amortization, higher priority ratings.

During the past few years, there has been a worldwide shortage of newsprint. The U.S. hasn't been exempt, and things have been getting worse all the time. The reason? There just hasn't been enough new plant capacity to take care of soaring demands.

Now, to get some new plant built, the Defense Production Administration has boosted newsprint's classification from "industrial" up to "essential." This means the industry will get the same priority on materials for expansion as machine tool factories and steel mills. Furthermore, the government has decided to grant rapid amortization certificates to the new plants.

• **Why No Plant?**—There are two main reasons why newsprint makers have been reluctant to put up new facilities:

• The huge amount of capital needed for a newsprint plant, and the comparatively slow returns.

• Competition from Canada, which supplies about 80% of U.S. newsprint—and ships it in duty-free.

• **Gloomy Picture**—It was a look at the figures that suddenly made the government newsprint-conscious: Last year the National Production Authority's paper and publishing divisions checked into future worldwide newsprint requirements. They found that:

• The world deficit in newsprint would get worse in 1952. The shortage would be around 600,000 tons annually.

• The U.S. supply would fall 344,000 tons short of needs in 1952, 494,000 tons short in 1953.

• But **Hopeful**—Present U.S. production of newsprint runs at about 1.1-million tons a year. To make up the expected 494,000-ton shortage by 1953 will mean almost a 50% boost within two years. But NPA thinks it can be done—with the help of rapid amortization. At present, NPA is holding applications for certificates of necessity amounting to 252,000 tons. So far, nobody is standing in line to take up the other 242,000 tons of planned output. But NPA thinks that once the present applications are approved other mills will be quick to speak up for the balance of the tonnage.

At any rate, NPA hopes so: The American Newspaper Publishers Assn. figures that for the next eight years the

U.S. will need an average of about 156,000 tons of new supply a year.

• **Canada**—The strong steady demand for newsprint can be seen by looking at Canadian production statistics. Ever since 1947, Canadian mills have been operating over 100% of capacity. In addition, Canada has added over 1-million tons in the last four years—almost as much as the entire U.S. annual domestic output.

• **Another Way Out**—Fortunately, increased production does not have to wait on the installation of new mills. In fact, the large part of the postwar increase in the Canadian and U.S. supply of newsprint has come from modernization of existing plant rather than from new plant.

Half of the 252,000 tons in for NPA authorization represents modernization and addition to old plant. The only new plant planned so far is a completely integrated mill to be put up by Bowater-Southern Paper Corp. at Charleston, Tenn. The cost will be about \$55-million.

• **Financing Problem**—The main reason why—in this era of all-out expansion—newsprint has been lagging behind is the tremendous amount of money needed to put up a plant. Today it takes about \$110,000 of initial investment to get 1 ton of daily production. And then the plant will be competing against older mills that were built when it cost only \$25,000 to \$40,000 for each ton of daily output—investments that are now all written off anyway.

It's a matter of profitability, too. The return on the capital invested is greater in other types of paper making, and that's where most of the new money has been flowing.

• **Canadian Problem**—The competition from Canada is another sword hanging over any new mill. Any new high-cost mill would have to face the older and comparatively low-cost Canadian operation. In case of a recession, the older mills can operate at a price that would put a new expensively erected plant to the wall.

But now rapid amortization will help solve all these problems. As long as capital is returned quickly, people are willing to invest in the industry. And this way, new capacity can compete directly with the older plants.

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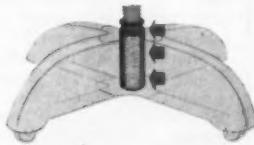
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Butyl's Future . . .

... is bright, Truman tells Congress. He urges that this branch of the rubber business be sold to private industry.

The private rubber industry is still scratching its head over President Truman's message to Congress on the \$700-million government rubber business.

The industry had expected a fairly routine message, recommending continued federal control of the synthetic plant the government built up during World War II. The recommendation was there, all right, but it carried two startling kickers:

- Truman urged that those government plants producing butyl rubber be disposed of to private industry. Their present production is over 70,000 tons a year; expansion to 90,000 tons is nearing completion.

- He put in a terrific plug for private industry's carrying of the ball in research and development of butyl.

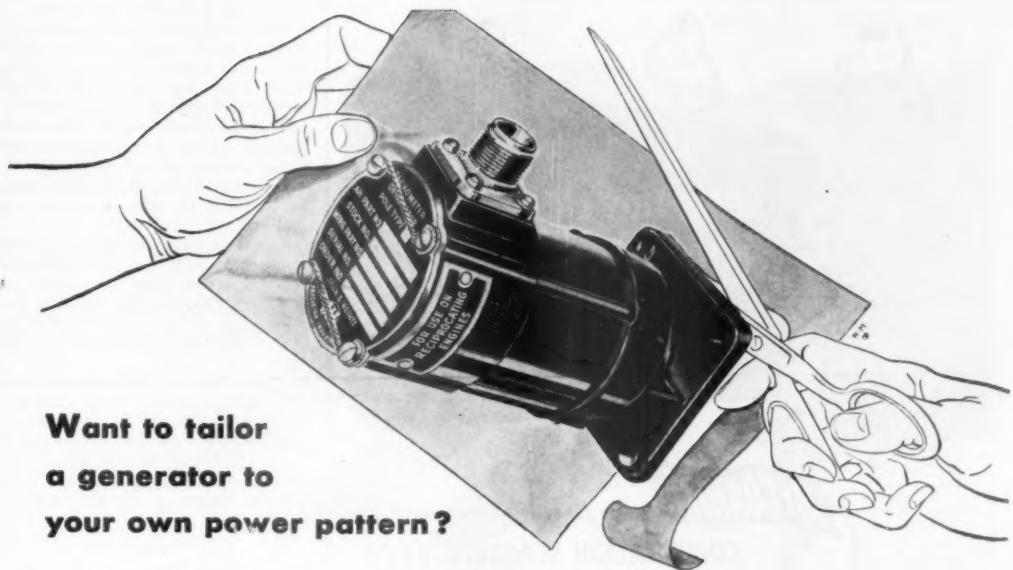
The President tossed various roses to butyl, which at 20¢ a lb. is now the lowest-priced rubber on the market. (Natural rubber: 52¢ a lb.) He even indicated that butyl might become a general-purpose rubber, shedding the "special-purpose" label that has confined it largely to innertubes. "Research on all-butyl passenger tires," Truman said, "has yielded very promising results, which could result in a many-fold increase in demand."

- Shortage—Mobilizers who have the job of allocating butyl report that demand is way above supply. That's natural enough: When butyl serves a user's purpose, he naturally prefers its price to the 26¢ a lb. for GRS. Incidentally, butyl is the only rubber still allocated by National Production Authority.

Truman's optimism about butyl's future stems from tests made in California in November and December by Standard Oil of N. J. Tire carcasses built of butyl were tested at moderate speeds. They wore well, but no better than cold rubber, according to researchers. Some disadvantages were noted, especially in strength, but Standard still hopes to develop a butyl that will serve for tires.

Even now, some moves have been made for further increases of butyl capacity. But private industry won't move so long as existing plant is owned by the government, for fear of being caught in a future price squeeze.

- Congress—That would seem to enhance the chances of the existing plants being turned over to private industry,



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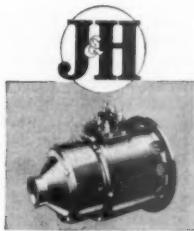
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as Truman suggested. But behind the scenes you get a different picture.

Rubber legislation, which expires this June, is in the province of the House and Senate armed services committees. Two years ago—before Korea—both committees opposed the government's selling the plants, mainly on security grounds. They feared that the synthetic industry would go to pot if it were in private hands and there should be a return to really low-priced natural rubber.

Everything that has happened since Korea has reinforced the committees' belief that they were right before and that they should make the same decision again. So it's expected that the government will hang on to the butyl plants.

Trade circles in Washington think that the end product of the President's recommendation will be a further expansion of government butyl capacity. It's even hinted that a bill to this effect is ready and waiting to be tossed into the hopper at just the right moment.

Tungsten Mining Corp. Aims to Double Capacity

U. S. producers of tungsten ore are now straining to get every chunk of the metal out of the ground. The reason—besides defense demands—is that the Reds cut off the biggest sources of the U. S. supply when they moved into China and Korea.

• Touched Off—Domestic efforts to narrow the gap between demand and supply were touched off last year when the tungsten division of Union Carbide & Carbon Corp. opened up its mine at Bishop, Calif. Union Carbide mines 1,200 tons of ore per day, which makes it the top stateside operator.

Now Tungsten Mining Corp., Henderson, N. C., the second-largest U. S. producer, is doubling its capacity. The deadline for its program is set for July. Tungsten Mining will then be turning out 600 tons per day. The annual production will be worth about 1.9-million lb. of the pure metal.

• Just Plain Digging—Tungsten Mining has it easier than most operators, though. Its ore is of high-grade quality with very few impurities, doesn't take so much refining as that from the western states or Asia. So the firm won't have to install any new processes for extraction or refining.

For Tungsten Mining the operation will be a case of just plain digging for years to come. The company figures that it can recover more than 80-million lb. of ore above the 3,000-ft. level of its field. And so far it hasn't gone deeper than 800 ft.



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TAXES

Estate Splitting

You can save federal estate tax by using the marital deduction—but you can also lose sometimes.

Where there's a will there's a way to save on estate taxes. A 1948 change in the tax laws—made along with the joint income tax return for married couples—sharply cuts the tax on property left to a spouse. Surprisingly, many people have overlooked it. Even though the law is on the books, they're going along on wills made before 1948.

It's an academic point unless your estate exceeds \$60,000 by quite a bit. There's a fixed exemption of \$60,000 before the federal estate tax begins to bite. But there are big savings beyond that level.

• **How the Tax Applies**—At death, the value of all property, including insurance benefits, is lumped in what is called "the gross estate." Debts, funeral expenses, and costs of administering the estate are deducted to arrive at "the adjusted gross estate." Then amounts left to charity and amounts left to the surviving spouse—the marital deduction—are taken out, as well as the \$60,000 fixed exemption. Tax is payable on what's left.

• **The Marital Deduction**—Not all property bequeathed to the surviving spouse is automatically deductible. The maximum marital deduction is 50% of the adjusted gross estate. But a man with an estate of up to \$120,000 can escape the estate tax entirely by seeing that the marital deduction applies. If he leaves half his property to his wife, that reduces his estate to less than the \$60,000 fixed exemption.

Where the estate runs higher, some tax will have to be paid, as this table shows:

Estate before \$60,000 exemption	Tax without marital deduction	Tax with marital deduction	Saving
\$100,000	\$ 4,800	\$ 0	\$ 4,800
200,000	31,200	4,800	26,400
250,000	41,300	10,700	34,600
300,000	59,100	17,500	41,600
350,000	73,300	24,400	48,900
400,000	87,700	31,500	56,200
500,000	116,500	45,300	71,200
750,000	191,800	80,500	111,300
1,000,000	270,300	116,500	153,800

Notice that where a tax has to be paid, it's always cut by more than half. That's because the marital deduction, like any other deduction, comes off the top layer of the estate, the part that pays the highest tax. Like the individual income tax, the estate tax is gradu-

ated to hit hardest at the highest brackets.

• **Ways to Lose**—There are many ways to lose the advantage of the marital deduction, as current records of the probate courts show. You can fail to leave half your property to your wife; in that case, you get some benefit of the allowed deduction, but not full advantage of it, or you can hedge the bequest to your wife with so many restrictions that the marital deduction is lost entirely.

There's no question about the application of the marital deduction when property is left outright to the wife. Where you need expert advice is in cases involving trusts or other restrictions on the survivor's freedom to use the property.

For example, the law allows the marital deduction for a trust created under a will where the wife gets the income for life, if she has the right to decide who is to get the principal after her death.

But the law does not allow the deduction in trusts where the wife gets the life income and you specify who is to inherit the principal when she dies. The option must be left to the surviving spouse.

There's no marital deduction either when a will specifies that the wife is to lose the income from the trust if she remarries.

• **Can Work in Reverse**—It isn't safe to arrange your bequests to bring the marital deduction into play, unless you first take stock of your family's estate situation. Indiscriminate use of the marital deduction provision can cost more tax money instead of less.

The marital deduction and the joint income tax return were written into the law books at the same time and with the same general aim. But there's one big difference between them.

The joint income return is a foolproof way for a married couple to equalize the family income. It pulls the husband's income down by the amount in which it exceeds his wife's income, so he's taxed at a lower bracket. The greatest tax saving is where the husband has all the family income. There's no advantage where both have about the same income. But the joint income return never backfires by actually increasing the tax. The marital deduction provision of the estate tax does sometimes backfire.

• **Examples**—If husband and wife have approximately equal estates, splitting either estate by use of the marital deduction won't reduce the family tax cost. In fact, the survivor's estate is pushed into a much higher bracket by

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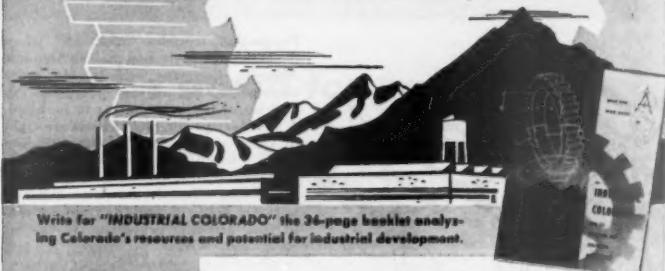
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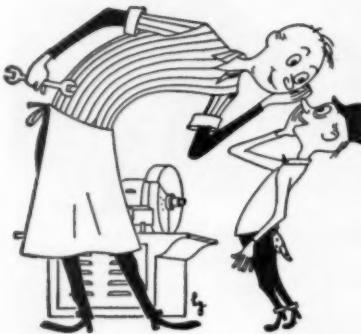
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Production troubles "took off" when the grinding department took on Simonds Abrasive Company wheels. No more bottlenecks. No pile-up of rejects. No backlog of D O's clamoring to be filled. Why? Because Simonds wheels are right in grain and grade for every grinding job . . . essential production tools made by Simonds Abrasive Company, a major manufacturer for 60 years. Let a Simonds engineer help you find the right answers to your grinding problems. No cost or obligation. Write.

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EXECUTIVES — Simonds Abrasive Company's complete line has everything you need . . . grinding wheels, mounted wheels and points, segments and abrasive grain.

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the adding of half the other's property to an already hefty holding.

Thus, any ill-advised use of the marital deduction may completely reverse its purpose. It may telescope two approximately equal estates into one that's taxable at a much higher bracket.

Where the estate tax provision isn't foolproof like the joint income tax return is this: Property passing to the surviving spouse doesn't really escape the estate tax—the tax on that property may be merely postponed to the time of that spouse's death.

As with the joint return, the greatest tax saving is where one person owns all the property and the other owns none. Full use of the marital deduction then splits the estate so each half pays the lowest possible tax. The total of the two taxes is lower than one tax would be on the entire family estate.

• **Imponderable**—Of course, when you plan to use the marital deduction in your will, you can't escape the big unknown: Which spouse is going to die first? Much of the planning of a will depends on assuming an answer to the question.

The best that can be done is to arrange the best possible distribution of property between the estates of husband and wife for the minimum tax in event of the death of either one first or of their simultaneous death.

That keeps the estate taxes as close to the same level as possible, and it's the most economical way of passing property within the family. And that's why the services of a lawyer in reviewing your old pre-1948 will are advisable.

TAX BRIEFS

New Treasury regulations require corporations to file information returns on all dividend payments in excess of \$1. Previously, they had to file only on dividend payments exceeding \$100. Information returns for 1951 are due by Feb. 28.

If you take your wife along on a business trip, and the company pays her expenses, you'll have to pay income tax on what her trip costs. The tax court says it's additional compensation.

Trade with the Virgin Islands qualifies for the favorable tax treatment given Western Hemisphere trade corporations, the Bureau of Internal Revenue just ruled. Bermuda doesn't.

A Court of Appeals decision allows a taxpayer who's on an accrual basis to deduct a reserve for a reasonably accurate estimate of expenses, as long as he can show that the expenses are pretty sure to be incurred.



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Ever wonder why grains like wheat can be stored for years . . . why they don't rot, mildew, or go up in flame? Part of the secret lies in rigid control of moisture content before the grain is stored.

Determining the moisture content in grain used to be a long laboratory procedure. But today, grain samples are simply put into a hopper of a Weston-Tag Moisture Meter and rolled between two electrodes. The instrument shows the exact moisture content instantly. Thus grains now are purchased to rigid moisture specifications, and safely stored when moisture content is just right.

In other industries, too, such as food, chemical, leather and lumber, moisture meters provide vast improvements in product quality, and lower

costs. Just pushing electrode needles into lumber, for example, gives exact moisture content . . . to safeguard against warping, and insure perfect gluing and finishing. Surfaces to be painted are now first checked for moisture, to eliminate blistering and peeling.

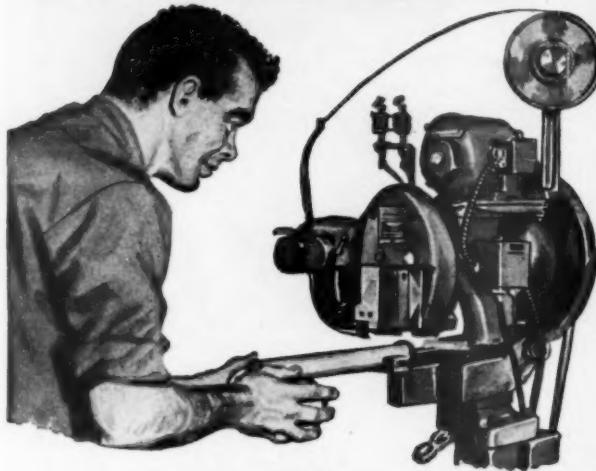
The solution to industry's costly moisture problems by means of simple instrumentation typifies the advanced thinking you will find at WESTON on all measurement problems whether they involve moisture, electricity, light, temperature or pressure . . . WESTON Electrical Instrument Corporation, 580 Frelinghuysen Avenue, Newark 5, New Jersey . . . manufacturers of Weston and Tagliabue instruments.



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but make the best use of both."**

—Ben Franklin, 1748

Assembly time and assembly costs are important to your over-all profit picture. The fastening method you use may well be the difference between black ink or red.

In many cases today you can assemble products far faster, better, and at lower cost with an Acme-Morrison Metal Stitcher than you can with expensive rivets, screws, nails, bolts or spot welds.

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Many manufacturers have saved materials and labor costs, and improved their finished products at the same time, by turning to Metal Stitching.

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Pipeline Tax . . .

. . . doesn't set well in Texas. Pipeline people claim it's unconstitutional. Texas may wind up shy of cash.

Can a state tax a natural product that's shipped to other states? This question has come up in the Texas courts and will probably go all the way to the U.S. Supreme Court. Pipeline companies filed suit at Austin, Tex., to set aside the state's new tax on gas "gathering." They contend it violates the U.S. Constitution's interstate commerce provision.

Louisiana had pioneered such a tax, and it has never been contested in court. Last year the Texas legislature levied a tax of 0.9¢ per 1,000 cu. ft. on the business of gathering gas. The tax was frankly aimed at the pipeline companies. Many gas producers applauded it. The new tax seemed to them like a fine alternative to an increase in the existing tax on gas production.

• **Backfire**—The gathering tax was effective Sept. 1, and payments have been made for September, October, November. They totaled about \$24-million for the three months. Of this, some \$1.5-million was paid "under protest."

This leaves Texas officials in a stew. Gov. Allan Shivers says he'll have to call a special session of the legislature if the tieup of revenue creates a deficit in the state treasury. The lawmakers had figured the new tax would yield \$14-million the first year, more later. Before going home last June, they appropriated for the next two years on the basis of this anticipated income.

Some gas producers are also upset. The new law, as now interpreted, is hitting them as well as the pipeline companies. That's because producers often pipe gas from their wells to the boundaries of their leased fields—that makes them "gas gatherers" just like the big pipeline outfits. Of course, the pipelines are trying to shift the tax burden to the producers wherever they can.

• **Far-Reaching**—The pipeline people have a big stake in the question of constitutionality. They didn't fight in Louisiana, but now they've decided the price is getting too high. If they win their case, it will be hard for states to hit them with special taxes; if they lose, they'll be vulnerable to new tax bites by other producing states.

If the tax is thrown out, companies that paid under protest will get refunds automatically. Others will get their money back only if the legislature appropriates funds for this purpose.

help!



...for overworked payroll departments

Why pile up costly overtime or hire more payroll clerks? Work-saving methods are a better—and cheaper—answer to heavier payroll work loads.

For example: One firm that had 68 employees last year now has 130—yet actually spends fewer work-hours on payroll accounting! Their new method: Remington Rand Multi-Matic. Just one writing instead of three to get pay check (or cash slip), earnings record and journal.

Another company was pleased to learn that a heavy-duty, completely electrified accounting machine was economical even for their modest-sized payroll—they use it to simplify and speed accounts receivable and accounts payable as

well. The machine: Remington Rand's versatile "Foremost."

Still another example: The payroll of a large manufacturer had to be synchronized with a highly detailed weekly analysis of job costs. Easy! Remington Rand Punched-Card Tabulating Machines do the *whole* job . . . many times faster and at far lower salary-and-equipment cost than would otherwise be possible.

To learn how you can lighten *your* payroll work load, phone the nearest Remington Rand office or mail the coupon. Making, as we do, *all* types of payroll equipment—manual and mechanical—we're free to suggest the best and most economical method for you.

For your needs
we have no reason
to recommend anything
but the right machines
and systems.
We make them all

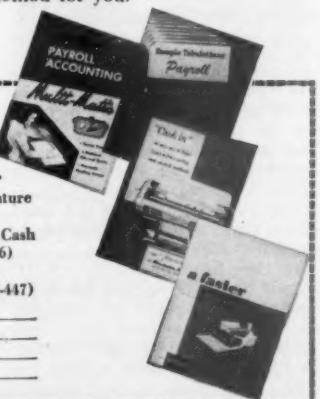
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Name Title
Company
Address
City Zone State



MARKETING

Whiskies the U.S. drank in 1951; brand by brand

Rank	Brand	Distiller	Type	Cases Sold (est.)	% Change
				1951	1950
1	Seagrams 7 Crown	Seagrams	Blend	9,600,000	10,000,000
2	Calvert Reserve	Seagrams	Blend	3,600,000	3,500,000
3	Schenley Reserve	Schenley	Blend	3,300,000	4,100,000
4	Corby's Reserve	Hiram Walker	Blend	2,700,000	2,800,000
5	Imperial	Hiram Walker	Blend	2,650,000	3,050,000
6	PM DeLuxe	National	Blend	1,600,000	1,725,000
7	Four Roses	Seagrams	Blend	1,500,000	1,700,000
8	Carstairs White Seal	Seagrams	Blend	1,400,000	1,440,000
9	Paul Jones	Seagrams	Blend	1,350,000	1,150,000
10	Old Sunny Brook	National	Blend	1,270,000	1,550,000
11	Cream of Kentucky	Schenley	Blend	1,250,000	1,350,000
12	Old Stagg	Schenley	Straight	1,200,000	950,000
13	Seagrams V.O.	Seagrams	Canadian	1,150,000	950,000
14	Early Times	Brown-Forman	Straight	1,000,000	850,000
15	Fleischmann's Pfd.	Fleischmann	Blend	950,000	900,000
16	Canadian Club	Hiram Walker	Canadian	910,000	775,000
17	Park & Tilford Reserve	Park & Tilford	Blend	800,000	900,000
18	Hunter	Seagrams	Blend	770,000	900,000
19	Old Thompson	Glenmore	Blend	700,000	760,000
20	Good Old Guckenheimer	American	Blend	684,000	750,000
21	Echo Springs	Schenley	Straight	680,000	540,000
22	Old Charter	Schenley	Straight	620,000	430,000
23	Old Sunny Brook	National	Straight	610,000	N.A.
24	Hill & Hill	National	Blend	600,000	810,000
25	Hill & Hill	National	Straight	575,000	N.A.

Straights Gain, Blends Still Lead

The news in the liquor industry still centers on the battle of the straight whiskies vs. the blends.

The blends are still slipping. They were off nearly 2.4-million gal., or 3.1%, for the first nine months of 1951. The straights continued to make the big gains. They increased their volume by 3.9-million gal., or 21.9%. (This was despite a slight dip in the bonded whiskies of 559,000 gal., or 7.2%.) Canadian whiskies—which are halfway between a straight and blend, being a blend of light straights—scored sales gains of 39.7%.

But these figures, prepared by B. W. Corrado, liquor consultant, reflect one important new note. The straights' rate of increase has slowed down. Their 21.9% gain for 1951 is much less than the 72% rise they made in 1950 over 1949. Their gains in 1951 occurred

largely in the South, Midwest, and Far West; blends pretty much held their own in the East. And over-all, blends are still outselling straights by a ratio of more than three to one.

• **Thanks to Blends**—The big trick of the year was that, in the face of threats from straights, an embattled Seagrams was able to hold its No. 1 position in the industry—on blends alone. Distillers Corp.-Seagrams, Ltd., still does 30% of the industry's dollar volume. And five of its blends are among the 10 top-selling whiskies (table, above).

Seagrams' decision to buck the trend to straights (BW-Sep. 22 '51, p50) was really a vote of confidence in its own product. It had reached the No. 1 spot on blends; it figured it could keep it on blends. Besides, Seagrams didn't have the overpowering reason

for stressing straights that Schenley had: huge overstocks of whiskey (BW-Jul. 7 '51, p118). Seagrams has big inventories, of course, but it is not overstocked for the volume of business it is doing. (Seagrams' total sales for the year ended July 31, 1951, were \$750-million.)

• **Not Just Straws**—The industry expects that the nine-month figures will reflect those for the full year of 1951. So BUSINESS WEEK has projected the available data on liquor sales in some 27 states to come up with a rough appraisal of how the brands scored. Since whiskey (including Scotch) accounts for 86% of the total volume of U.S. liquor sales, it's a real gauge of a distiller's relative strength.

• **Seagrams Leads**—Brandwise, the outstanding fact is that the two Joseph E. Seagram & Sons brands, 7 Crown and

Pardon My
Ignorance
by Pinet



*I thought a **POOROUS MEDIUM** was a fortune-teller you could see through
... until I got the facts from Norton*

Now I Know:

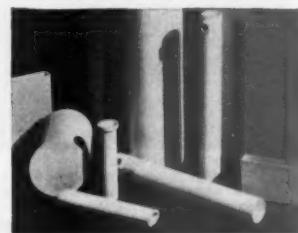
Porous media are ceramic filters made of bonded refractory material, fired at extremely high temperatures. They are produced in many shapes for a wide variety of industrial filtering and gas diffusing operations.

Norton porous media of **ALUNDUM*** (fused alumina) are manufactured by an exclusive "controlled structure" process that assures positive control over grain spacing and more precise duplication of mediums, with uniform strength, chemical stability, and resistance to heat. Bulletin 140 tells you more about Norton porous media.

In high-temperature refractories, as in porous media, Norton engineers have a unique ability to tailor refractory materials to exacting requirements. That is why so many firms with complicated high-temperature process problems look first to Norton, pioneers for 40 years in the engineering of special refractories. For detailed information, contact your nearby Norton representative, or write to Norton Company, New Bond Street, Worcester 6, Mass. Canadian representative: A. P. Green Fire Brick Co., Ltd., Toronto, Ontario.



NORTON ALUNDUM DIAPHRAGMS are used as porous partitions between anode and cathode in various electrolytic processes. They are manufactured under conditions similar in most details to those used in producing Norton ALUNDUM porous plates, tubes, and discs.



REFRACTORY CORES of Norton ALUNDUM are extremely useful in electrical furnace manufacture. Molded with grooves to retain the resistor wire, they are chemically inert, have high heat conductivity and do not become electrical conductors even at high temperature.

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NORTON

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Making better products to make other products better

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OUR MOST CRITICAL SHORTAGE**

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Kennametal, as a tool material, turns forgings and castings into machined parts, far faster than steel tools, and is many times as durable. One man and a Kennametal-tooled machine can do the work of three men and three machines equipped with steel tools. The time of two men and two machines is saved—plus the time and materials required to produce the steel tools.*

Used in mining tools—Kennametal cuts and drills coal and other materials faster, and outwears steel tools a hundredfold. Production time is saved, plus the time and materials required to make the far greater quantity of steel tools.

Used at points in machines where severe wear occurs . . . Kennametal stubbornly resists abrasion, corrosion, and heat. The machine performs accurately much longer. Again, production time is saved, plus time and materials needed to build replacement machines.

All costs are based on time—in peace these costs are reflected in prices that are cheap or dear; in war they are reflected in lives that are saved or lost. The time that Kennametal makes—important in peace—is imperative in war.

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... is a unique "cemented carbide"—much harder than the hardest tool steel—composed of pure crystals of different carbides that we refine straight from ore, oxides, and other raw materials. These crystals are so small that billions of them will fit into a single cubic centimeter. Controlled quantities of these tiny elements are mixed with a "binder," formed into desired shapes under terrific pressure, then fused in heat so high it would destroy steel in seconds!

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WORLD'S LARGEST Independent Manufacturer
Whose Facilities are Devoted Exclusively to Processing and Application of CEMENTED CARBIDES

". . . the drop was offset by increased sales of other brands . . ."

Liquor starts on p. 142

Calvert Reserve, between them account for almost a fifth of the industry's total whiskey business. The company has seven brands among the industry's 25 top sellers. Three of the seven showed gains over 1950, so that its net loss was less than 2% in these brands. This drop apparently was more than offset by increased sales of the company's other brands, including two recently revived low-priced blends—Gallagher & Burton and Kessler's.

• Schenley Follows—Schenley, the No. 2 company, had estimated sales of some \$450-million in 1951, for the year ended Aug. 31. (This figure, however, includes liquor, wine, beer, and chemicals.) It did fine on its straights. Its Old Stagg and Echo Spring straight bourbons were top sellers in many markets. Its higher-priced Old Charter, a six-year-old bourbon, was the only expensive bourbon to make the best-seller list.

On blends, Schenley had another story to tell. Schenley Reserve, a top seller several years ago, slipped to third place; its Cream of Kentucky blend slid from tenth place to eleventh. The Schenley blend picture may well have accounted for some of the company's drastic shifts in advertising agencies this year (BW—Sep. 22 '51, p43).

• Next . . .—Here's how the other majors line up:

National Distillers, with estimated sales of \$370-million for the calendar year, probably had a good year, too, thanks mainly to such straights as Hill & Hill and Old Sunny Brook. National also distributes Gilbey's gin, which battles for first place with Gordon's gin, a Distillers Co. product.

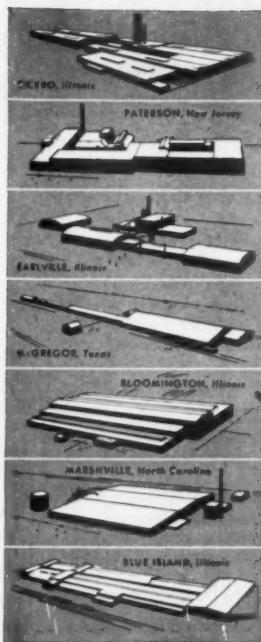
Hiram Walker was sitting pretty. Its sales are estimated at \$350-million for the year ended Aug. 31, up some \$7-million from the preceding year. Two of its brands, Corby's and Imperial, both low-priced blends, were up among the top five. Walker's Canadian Club was second to Seagram's V. O. in the rising market for Canadian whiskies.

Brown-Forman is one of the independents that have managed to establish top-selling brands—its recently revived Early Times straight bourbon landed among the leading straights.

Fleischmann Distilling, subsidiary of Standard Brands Corp., scored with its blend, Fleischmann's Preferred.

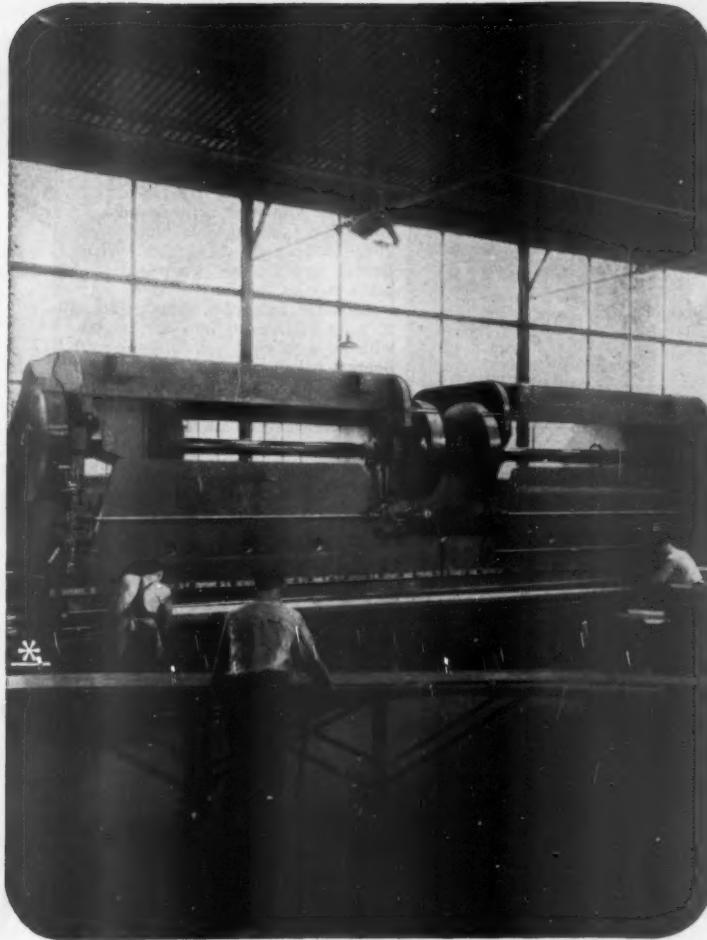
Park & Tilford's straight bourbon, Kentucky Bred, made gains that helped offset the loss of its blend, P&T Reserve.

Glenmore practically duplicated Park



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many industries'
needs for . . .

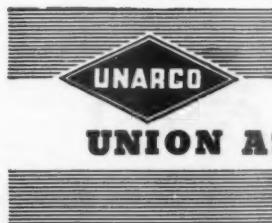
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EACH DIFFERENT DIVISION CONTRIBUTES ITS SHARE TO

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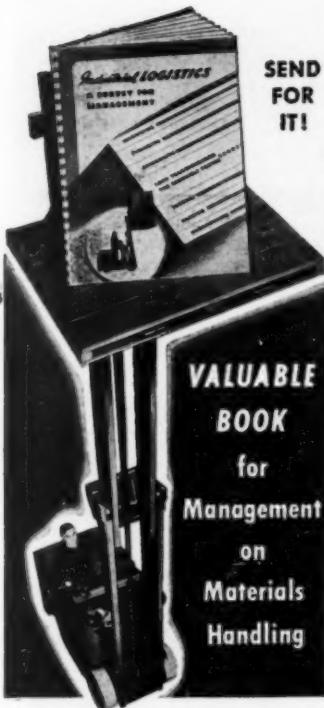
Perhaps you've never thought of Union Asbestos & Rubber Company as metal-workers, too, yet metal products long have loomed large in the broad Unarco picture. These include railroad specialties, refrigerating equipment for trucks and trailers, and general sheet metal fabrication. One of the mid-west's largest hot-dip galvanizing plants is operated by Unarco's Equipment Steel Products Division. Whatever the work, whatever the field, "Unarco-Made" means quality.



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Learn about the savings being made by over 50 types of Elwell-Parkers (both gas and electric powered) in 300 branches of industry. For your copy of "Industrial Logistics", write The Elwell-Parker Electric Co., 4001 St. Clair Avenue, Cleveland 3, Ohio.

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Power Industrial Trucks
Since 1906

"... several distributors are closing their doors . . ."

LIQUOR starts on p. 142

& Tilford's record; its Glenmore Silver straight bourbon and its Kentucky Tavern bond more than made up for a drop in its blend, Old Thompson.

American Distilling seems to be forging ahead with most of its brands. Its Good Old Guckenheimer blend made 20th place among whiskey best sellers. But its products are low-priced, and profit margins are slim.

Publicker Industries, once expected to make big inroads into the business with its large whiskey holdings, is still fighting to get a few of its brands on the top scoring list. It does manage to sell more goods than other independents by the sheer number of brands that it has on the market—half-a-dozen straight bourbons, half-a-dozen bonded bourbons or ryes, half-a-dozen blends, and others.

• In the Balance—Whether Seagrams is able to hold on to its position depends partly on what its competitors do pricewise. There's no doubt that it found the going rugged in some parts of the country last year. Deep discounts by competitors on their straights—sometimes as much as \$5 a case—hit Seagrams' distributors hard. If prices on straights go still lower, Seagrams may be in for trouble. And in view of the big whiskey stocks held by Schenley and National, lower prices on straights look probable.

But though discount deals on straights hurt Seagrams in the South and West, they made trouble for competing distributors, too. They meant lower profit margins, since the distributor often has to give up some of his profit in return for discounts. The distributor usually goes along with "dealings" for fear he'll lose his franchise, even though he is lucky to be making 2% on his present gross business.

Both National and Seagrams are giving their distributors long-term franchises. But even so, several distributors are closing their doors, and many more are wondering how long they'll be able to hang on.

Only a few weeks ago, Morris Alprin, general counsel of the N. Y. Wholesale Liquor Dealers Assn., warned distillers that many wholesalers would have to sell out. Declining sales, rising costs, lower profit margins, and distiller pressures would do them in.

• Prophecy—For 1952 industry expects a moderate decline in liquor consumption from 1951's 195-million gal. The higher federal excise tax (\$10.50 a gal.) is the reason. So far, though, there are no figures that show what the new tax has done to the industry.

Nebraska offers great opportunity as plant location

In this debt-free state where old-fashioned Americanism still prevails, you will find—

- splendid labor
- cheap electric power
- abundant natural gas
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Low-cost trouble-free Operation

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OF ALL KINDS!

Steel mills and foundries need more scrap.

Not just "production" scrap from metal-fabricating plants . . . but also all sorts of *idle* iron and steel—from all types of plants.

Search your plant for this idle metal . . . work with your local scrap dealer to increase supplies of badly-needed iron and steel scrap.

What to look for . . .

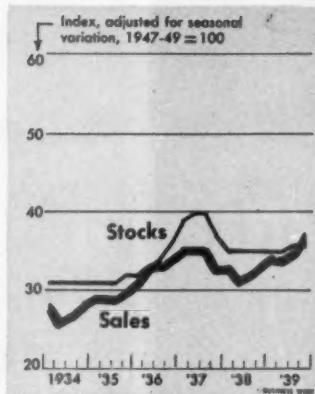
obsolete machines, tools and equipment, no-longer-used jigs and fixtures, worn-out or broken chains, wheels, pulleys, gears, pipe, tanks, drums and abandoned metal structures. Non-ferrous is needed, too!



**McGRAW-HILL
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330 WEST 42nd STREET • NEW YORK 36, N.Y.



1 Before the 1930s, this was the traditional relationship of stocks to sales. Merchants always bought well ahead.



2 Faster transportation made it unnecessary to stock up so far ahead. Besides, the depression taught merchants caution.



3 World War II distorted the new pattern. At first merchants bought heavily. Later they couldn't find enough goods.



4 Postwar years brought a resumption of the hand-to-mouth policy—until Korea. Now it's the same old question . . .

Who'll Hold the Inventory?

Manufacturers are again talking like Dutch uncles to retailers—telling them they'd better buy for their own good.

The manufacturers are hinting that another situation like you had a year ago is coming up. Then manufacturers, particularly in the apparel industry, were telling stories that what with forthcoming shortages, inventories were good as gold. Merchants believed them, bought six to nine months ahead.

The goods began to pour in just at the point when consumers stopped buying. That was about last March. This now-unwanted downpour of goods only served to make the inventory glut of 1951 worse than it might have been.

Ever since, retailers have been working off their heavy stocks. By fall it became apparent that they had made some headway. Going into November, department store stocks showed a dip below the previous year's level for the first time in 1951.

Going into December their stocks stood at about \$1,150,000,000 as against \$1,210,000,000 the year before. And outstanding orders were only \$374-million as against \$444-million.

Now the argument has started all over again. Merchants seem to be optimistic, but they are still cautious in their buying, as noted during the mid-winter furniture shows (BW-Jan.19 '52, p143).

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Here is the Webcor Electronic Memory by Webster-Chicago—the most versatile and flexible business machine on the market.

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FAIR TRIAL Customers bring their wash, try out washing machines right in the store.

Appliance Store Goes Supermarket—

Four months ago Kenn Dennstedt got tired of sitting in his San Diego appliance store and watching the customers go by. Like most appliance dealers, who were stuck in the buying doldrums, he had plenty of merchandise—literally stacks of it. But sales, no.

Dennstedt thought back to his days as operator of a grocery supermarket. Maybe, he figured, the impulse buying that works so well in food would work with appliances.

He scouted around for some new items to pull in customers. He found a distributor with a warehouse full of garbage cans. The distributor was happy to unload them at a reduced price. Dennstedt snapped them up, put a cut-rate price on them, stacked them on the sidewalk 40 ft. high in front of his store. Then he put some ads in the papers, and waited.

• **It Begins**—The customers came, looked around. They bought garbage cans and looked around some more. And, as Dennstedt had hoped, they began buying appliances. The idea was working. That was when Dennstedt

Electro Mart became the Super "A" Market.

To convert to a supermarket, Dennstedt remodeled his store, changed the layout. Phonograph records are heavy sellers, so he set them up at the rear of the second floor. To get to them, customers had to pass long aisles of gleaming new stoves and refrigerators. He added new brands—he now carries 10 major brands of TV, for example. He added new lines, small items, quick sellers such as Ronson lighters and Parker pens.

Because this was to be a self-service store as much as possible he minimized the salesmen's role. He dubbed his employees merchandise advisers, cut their commissions in half. He installed a "home economist," who doesn't sell, but explains how to work any of the gadgets on the merchandise.

• **Another Lure**—Supermarkets offer something else that the service store doesn't: lower prices. So wherever Dennstedt can, he cuts prices. In this, of course, he has had a break in the demise of fair trade. In fact, Denn-

stedt says, that's what makes his operation possible. He has only one fair trade agreement, with Sunbeam. For other lines, he scouts around till he finds a distributor who has a glut of some discontinued model. For lines that have no distributorships in San Diego he buys direct from the manufacturer. He picks up odd lots through telephone deals all over the country.

• **The Payoff**—Today Dennstedt is making more money than ever before. And so are his employees, despite their lopped-off commissions. Volume sales are doing more for them than higher prices. In December, 1951, Dennstedt's sales were 500% ahead of December, 1950.

The point in appliances, Dennstedt reasons, is that the manufacturers have done a marvelous job of creating demand. But they have held the rein on retail prices. The individual retail store, as a result, lost its individuality. The merchandise was the same everywhere; the prices were the same. But Dennstedt got away from all that. Low prices, big variety gives him something



FACT SHEETS on big appliances are posted on the spot to answer customer's questions.



DEMONSTRATOR

in chef's costume is range distributor. He drops in often to promote his line.

— and Likes It

to advertise. And he plays up his bargains heavily in his advertising.

• **Gimmicks**—There is plenty of advertising material at the Super "A" Market. One of Dennstedt's sales gimmicks is a TV club: You have to buy a TV set to join, but with it you get various price and trade-in concessions. You also get a special bonus—right now, an RCA record changer and \$6 worth of records.

Dennstedt's store is open on Sundays, too—another unusual feature. He has a chef there cooking coffee and making sandwiches on one of the display stoves, and he gives away toys for children. So far, this has packed the place every Sunday afternoon. Another gimmick is a new warehouse from which he sells crates of merchandise at a cut rate, to anyone who will haul it away and unpack it himself.

• **Lucky Breaks**—There's no doubt that timing has been in his favor. Besides fair trade, Dennstedt had another advantage: Distributors, like retailers, were overstocked. Some of them were reluctant to play ball with him at first. But when they saw how fast he sold



ADVERTISING is work of Dennstedt (left) and William Phillips, Phillips-Ramsey agency.

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20. Analysis of Principal Export Markets of U.S. Chemicals and Related Products
21. Report to Executives on South America (From *Business Week*)
22. What's Ahead for Export Advertising in 1952

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their goods, they came around. Now they like it so well that they are constantly offering him special deals.

• **The Future?**—If shortages should come, Dennstedt expects he'll have to follow prices up; he'll probably have trouble buying in the volume that's his top trump. However, he feels that, since both distributors and manufacturers like to do business with him now, they'll give him at least an even break. Besides, he says, he doesn't think there will be any shortages worth mentioning, anyway.

L-M Gets Ready For a Buyers' Market

The Lincoln-Mercury division of Ford Motor Co. is digging in against the day when red-hot competition will again be the word.

Auto makers have hardly known real competition since 1940. But knowing they will again someday, L-M has revamped its distribution setup. The object: to enable the dealer to speed up service to his customers.

Until recently, orders for cars went from the retailer to a representative at one of L-M's 23 district sales offices. The factory representative rewrote the order and forwarded it to the plant.

Starting in December, L-M pulled these representatives in from its outlying offices, set them up right in the assembly plants at Detroit, Metuchen (N. J.), St. Louis, and Los Angeles. The effect of the new arrangement is practically to put plant facilities at the dealers' disposal.

• **Simplification**—Under the old method, a customer might go to his dealer and say he'd decided on another color or body style. The dealer could hardly ever confirm the change while the customer waited. He would have to put in a telephone call or a telegram to the district office; the district office would put in more calls to the production plant before he would know the answer. Sometimes that was longer than the customer wanted to wait.

Now all the dealer has to do is get in touch with his car distributor contact at the plant. He can find out in a hurry whether the changes can go through. If they can't, he can get a fast explanation why they can't.

It's easier from the factory distributor's point of view, too. He's in a better position to keep up with sales trends in his own region. Often a particular body type or a special color seems to catch on in one section of his distributorship. If he is operating from the plant instead of from the district sales office, he will find it easier to make switches without disturbing his regional allotments.

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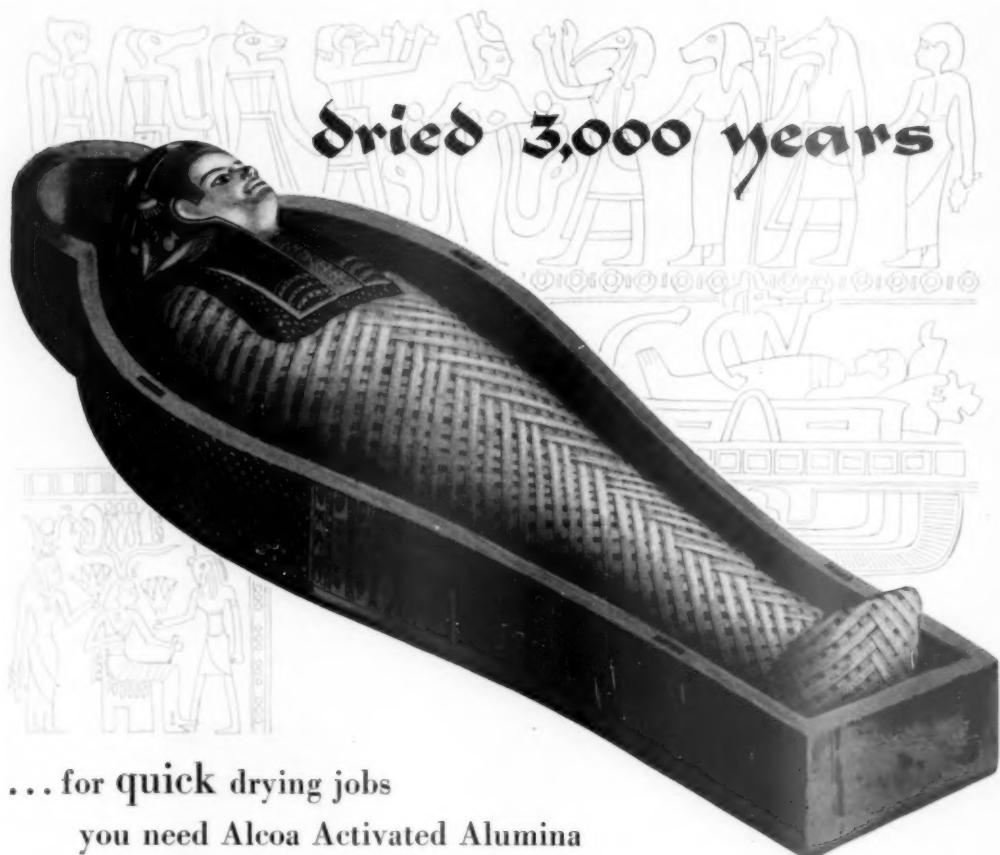
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Retailers Brace For Excise Tax

The President's 1952 budget spelled out one thing very plainly to retailers: An excise tax is looming. American Retail Federation has just issued a warning to the industry that it might as well face the fact that the issue of a broad-base excise tax at either the manufacturer or the retailer level will come before Congress. And the association is throwing its weight on the side of the retail-level tax. It reasons that a retail tax will be easier to repeal than one at the manufacturer's level.

The association urges that the government try other solutions first—limiting expenditures, revising present taxes so as to encourage incentive. But president Rowland Jones, Jr., in a special report urges that the industry get together now to settle for the lesser of what look like inevitable evils.

• **Cons**—The arguments against a tax at the point of manufacture are summed up briefly: The tax comes early in the production-distribution system. It has to be financed at each stage of distribution, become a part of the cost. Therefore, the tax pyramids far beyond the amount of the tax itself. Provided the tax is on a year-to-year basis, it would be less painful at the retail level.



Traveler's Aid

A new promotion gimmick is Guest Pac, a tidy package of assorted toiletries for hotel guests. Guest Pac Corp., which has built a business out of manufacturers' samples, puts the packages in rooms of 250 U.S. hotels. The hotels pay 20 cents apiece for them. Manufacturers give Guest Pac the samples plus a few cents a box for packaging and distribution. Over 500,000 boxes, stamped with the hotel's name and labeled Mr. and Mrs., have been distributed; another million are scheduled this year.

If You Operate Fleets Of Trucks, Autos, Or Taxis Here is Wonderful News

New "Police-Type" Radio now available for Industry. Gives instant radio contact with scattered field forces. Speeds up whole operation. Read how...

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ports phone bill cut from \$80 down to \$40 a month.)

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2-way radio in industry is still so new that *new uses are being found for it every day*.

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Get full story now on how this new money-saving tool applies to *your business*. Address postcard to Department 26AD, RCA Engineering Products, Camden, New Jersey. Please state *your type of business*.

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MARKETING BRIEFS

A. C. Nielsen, marketing research organization, will update retail food price data for the Office of Price Stabilization. OPS has had only 1942 price margin data to use as a basis for controlling prices. Now Nielsen is finding out what markups retailers were actually using just before the outbreak of the Korean War.

Servel had a net loss of \$988,766 for the year ended Oct. 31. Sales were down to \$46-million from \$57.3-million the year before. The loss was all in the refrigerator division of the company.

Market for TV sets is being broadened this year even with the freeze on new stations. Set makers, such as Westinghouse and Emerson, think more people will be able to receive TV through (1) increased power for existing TV stations and (2) increased sensitivity of sets.

Canned sterile whole milk is in the offing at Golden State Co., big California dairy products firm. The company has applied for a patent on a new canning process that results in a product that holds its quality and flavor up to a year, says J. R. Little, president.

A hot oleo fight is brewing in the New York State legislature. A bill to permit sales of colored oleo has gone to the Agriculture Committee, traditional opponents of yellow margarine. To get the bill through, adherents count on Gov. Dewey, who proposed the bill, plus strong consumer demand, plus the fact that New Yorkers can already get yellow oleo by tripping to nearby states.

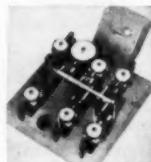
Shake-A-Plenty, an ice milk drink (BW — Aug. 4 '51, p46), is Walgreen's newest bid for more fountain traffic. It comes in a special Lily-Tulip cup, is now served at 325 Walgreen stores.

The Student Marketing Clubs, with a membership of over 5,000 college students, held its first national conference recently. Since September, 1948, over 83 clubs have been organized in the colleges; now they are affiliated with American Marketing Assn.

For tobacco-weary palates, Riggio offers something new: cigarettes flavored with cola and wintergreen. Their names: Smo-Cola and Wint-A-Green. The recipe: several pounds of flavoring essences to every 300 lb. of tobacco. The price: 28¢ a pack; both come in king-size packs.



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by *don herald*

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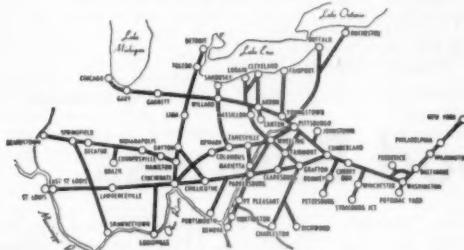
These men helped locate on the B&O over a billion dollars' worth of plants in recent years.

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They'll provide *comprehensive* plant location surveys without cost to you, and will keep as "mum" as a Baltimore oyster.



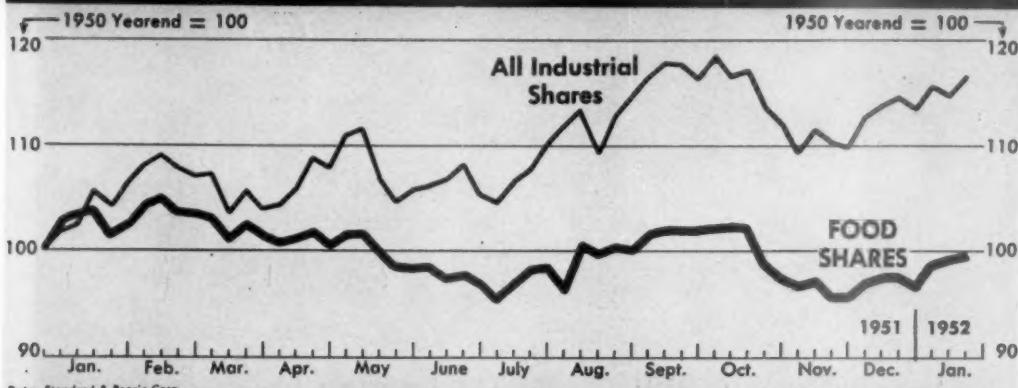
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FINANCE



	SALES		% Change	PROFITS		% Change
	for Fiscal Years (in thousands)	1951	1950	for Fiscal Years (in thousands)	1951	1950
Beech-Nut*	NA	NA		\$3,258	\$3,473	- 6.2
Best Foods*	NA	NA		997	1,522	- 34.5
Consolidated Grocers#	NA	NA		857	1,547	- 44.6
Corn Products Ref.*	\$142,232	\$128,243	+10.9	10,142	12,169	- 16.7
Cudahy Packing	640,434	583,382	+ 9.8	1,350	3,019	- 55.3
First Nat'l Stores†	201,517	182,005	+10.7	2,751	3,466	- 20.6
General Foods†	283,641	280,192	+ 1.2	8,613	15,746	- 45.3
Grand Union**	134,617	115,691	+16.4	1,261	1,676	- 24.8
Heinz# #	101,446	95,295	+ 6.5	3,369	4,082	- 17.5
Horn & Hardart††	37,493	36,229	+ 3.5	720	1,034	- 30.4
National Biscuit*	321,910	288,543	+11.6	11,586	15,508	- 25.3
Shattuck Co.	NA	NA		53	513	
Standard Brands*	256,237	223,494	+14.7	6,321	8,495	- 25.6
Swift & Co.	2,524,218	2,214,819	+14.0	12,109	16,143	- 25.0
Wesson Oil	183,433	145,927	+25.7	5,201	8,705	- 40.2

D — deficit

*Nine months ended Sept. 30.

24 weeks ended Dec. 15.

†Six months ended Sept. 30.

**Nine months ended Dec. 1.

Six months ended Dec. 1.

††Eleven months ended Nov. 30.

BUSINESS WEEK

Squeeze Is on Food Business

Food companies—all the way from the processor of the raw edibles to the corner grocer—have been raking in the money. The problem is how to keep some of it.

Costs have been rising. It's all very well to say, "Pass the costs along," but it doesn't work out so automatically in foods. The industry is up against the

habits and whims of the housewife. Moreover, throughout the last year, those habits and whims have been backed up by ceiling prices.

• **Different Viewpoints**—Adding to the complications, the food industry isn't a cohesive, well-knit unit with all its members seeing eye to eye. It has its manufacturers of packaged foods

like General Foods Corp. and Standard Brands, Inc. There are meat packers like Swift & Co. and Armour & Co.; Corn Products Refining Co. and Wesson Oil & Snowdrift Co. specialize in the vegetable oils. Then there is the distribution side—wholesalers such as Consolidated Grocers Corp. and Seeman Bros., Inc.—and the grocery chains with

such giants as A&P, Safeway, and Kroger. Another form of distributor is the chain restaurant, like Horn & Hardart or Stouffer Corp.

Naturally, these groupings have different problems. But last year they had one thing in common: Nearly all companies had less net income after taxes than in 1950, even though sales generally increased.

• **The Bite**—You'd expect some decline in earnings. First and foremost, unit turnover was sure to fall off, in many cases, from the unnatural level of 1950 scare buying. Beyond that, higher operating costs and taxes took their bite from the food companies along with everybody else. And inventories fell the sharp switch from rising to falling prices from February through July.

Here are examples, somewhat extreme, of what happened: Consolidated Grocers reported a 44.6% drop in profits during the 24 weeks ended Dec. 15, as compared with the same 1950 period. Cudahy Packing Co. reported a 55.3% drop in profits for its fiscal year ended Oct. 27. General Foods' decline was 45.3% for the six months through Sept. 30.

Lower earnings have had their effect on dividends. Directors of Clinton Foods, Inc., with 1951 earnings down sharply, recently passed a quarterly dividend on the common stock. The same thing happened with S&W Fine Foods, Inc. Horn & Hardart reduced its quarterly dividend to 25¢ per common share; the last two quarterly payments had been 35¢, before that, 50¢.

• **Sum Total**—What's happened to the food processors? They face rising costs of raw materials, labor, transportation, and higher taxes. At the same time, food supplies are abundant, and there is plenty of competition for the consumer's dollar. Consumers no longer have the buy-everything mania of World War II and late 1950.

These facts alone are enough to account for the big dropoff in earnings. The food companies are in a box. Profit margins on most of the items they sell are not very high; they make their profits by volume and quick turnover. In order to make up for higher costs and pay higher taxes, they have to increase volume. But most of the volume increase comes on just the items where they make the least margin of profit.

The food companies would be in this situation even if price control didn't exist. But undoubtedly price control has taken an additional bite out of industry profits, especially where meat is concerned.

• **Unfair Markups**—At any rate, food men have been complaining bitterly about the effect of price ceilings. Last week, for instance, the National-American Wholesale Grocers Assn. asked for



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a suspension of price ceilings on all food products that are in good supply.

The wholesalers complained that on many commodities they can't get prices so high as the ceilings. Furthermore, they were "prohibited by regulations from recovering reasonable or traditional profits on the remaining products." Markups allowed by the Office of Price Stabilization, they stated, are based on a 1942-1943 survey and don't take increased wages and other costs into account.

• Spelled Out—Price controls on groceries are based on averages. OPS takes a fixed group of food items, strikes an average of the markup percentages used during the base period. (Markup is what you add to cost price to produce sales price to the consumer.) This average becomes the maximum percentage markup of each item in the group.

Now when OPS uses an average, grocers say, they get something they don't want (higher markups on fast-moving items) in exchange for giving up an old trade practice they do want (higher markups on slow-moving items).

• Meat Woes—On meats, the situation is perhaps even worse. This is where grocers have been taking the worst beating—and meat sales are an important part of their total volume. As for the meat packers, their reported earnings (page 156) speak for themselves.

Let's take beef. There is no ceiling price until you reach the stockyard. Here, the big packers complain that they are losing business to less scrupulous operators who will pay higher prices for beef.

The retailer buys the dressed beef carcass from the packer or jobber. His problem here differs from the grocer's because: (1) He can't just buy the cuts he knows will sell best; (2) he has to keep meat moving out of his icebox; and (3) he has to conform with OPS cutting charts, which many butchers claim are outmoded.

To do this, the meat retailer readjusts prices on different cuts to keep them moving. Demand for individual cuts varies, depending on the time of year. So he raises prices on popular cuts and reduces prices on cuts less in demand in an effort to move them.

Now OPS sets uniform dollars-and-cents prices on each beef cut. This assumes there is a standard demand relationship between retail cuts, at all seasons of the year.

OPS people admit that, in some cases, grouping of commodities under one average markup has cut profits. The system does reflect early World War II, rather than pre-Korean, markups. However, OPS is starting a national survey to update its markup regulations. This is supposed to be ready in March.

OPS men argue that even if group averages were eliminated the food

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chains wouldn't make much more money. They say about 80% of the items chains carry are now selling below ceiling, though some food executives dispute this percentage. OPS does admit that the industry would make more money on meat without ceilings.

• **Oil Troubles**—In addition to the general problems of the industry, each branch of the food business has had its own private worries.

Oil processors handle either corn or cottonseed. Corn processors have been bedeviled by the higher price of corn during 1951, not all of which was passed on. Cotton seed processors, on the other hand, took sharp inventory losses.

• **Canners' Gripe**—In the canning field, processors ran up against many of the obstacles that bothered other food industries. Canners say, for instance, they tended to absorb rising costs on many items, rather than pass them on to the retailer. Of course, price control is one reason for this. But there's also the fact that consumers are accustomed to certain definite price ranges for food items. When prices go higher, they are slow to buy.

Fiscal 1952 earnings are expected to compare well with pre-Korea levels, though they won't be so high as for 1951, since the Korean War scare boosted sales of canned goods.

• **Package Deal**—The packaged food companies had similar headaches. For instance, they complain that they have been squeezed between higher costs—labor, raw materials, and freight—and price control and consumer resistance. Many food processors, offering only seasonal employment, are particularly vulnerable in a tight labor market like today's.

• **Not All Loss**—In spite of all these problems, you can see from the chart (page 156) that the food shares have made a modest comeback from their November low. Standard & Poor's food index finally is back just about where it started in 1951.

One reason for the rally in food shares is, of course, the year-end rally of the stock market as a whole. The food index has followed pretty closely, at a lower level, the trends in the general stock market.

But another reason for the slightly increased popularity of food shares is the feeling among analysts that regular dividends of most companies are pretty secure. At present price levels, this means rather attractive yields—anywhere from 5% to 10%.

At certain stages of the market cycle, Wall Street has always recommended the food shares for people who want income.

The industry is too basic to remain depressed permanently; the prospects of better things to come and favorable yields while waiting attract investors.

Credit Subsidiary Becomes Liability

For tax reasons, International Harvester Co. has decided to finance more of its time sales directly, instead of through a subsidiary. That's why last week IH announced it was going to borrow \$125-million for five years from a group of banks.

William R. Odell, treasurer, said that the present setup, under which a wholly owned subsidiary handles all financing, was unsound from the standpoint of paying excess profits tax. If IH borrowed money to finance time sales within its own corporate structure, he pointed out, it would have a higher invested capital base for figuring excess profits tax.

The move parallels that of another big Chicago outfit—Sears, Roebuck & Co. Last fall Sears borrowed \$200-million from banks for five years for the same reason (BW—Oct. 20 '51, p144).

International Harvester set up its credit subsidiary, International Harvester Credit Corp., in early 1949, provided it with equity capital and with debt capital in the form of subordinated notes. The subsidiary got additional funds through short-term bank loans. Now IH will gradually cut down its subsidiary's operations until it can get along without bank loans. It may even liquidate the subsidiary altogether.

Canadian Banks Switch To Five-Day Week

Manpower competition from industry is driving Canadian banks to the five-day week, just as it has already driven U.S. banks. It has been hard for Canada's 10 chartered banks, with their 3,000 branches and 42,000 employees, to compete with businesses that are already on the five-day week, especially in big cities. Even top employees have preferred more lucrative five-day-week jobs in industry to the job security and pension rights offered by banks.

About a year ago the banks tried to meet the problem by shortening Saturday hours to 9 to 11 a.m., instead of 9:30 to 12. But that didn't help. So, a few months back, the banks asked the Canadian Parliament to change the law that requires that they stay open Saturdays.

Now the banks have Parliament's O.K. to go ahead. Before long they expect to have worked out a uniform plan for urban and rural closings. Banks in large cities will probably all close Saturdays, though perhaps some banks in residential and suburban shopping areas will stay open from 9 to 11.

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NEW ISSUE

January 17, 1952

\$29,000,000

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Subject to the terms and conditions of a Purchase Agreement, negotiated by the undersigned, certain institutional investors have entered into a commitment to purchase the above Bonds.

The First Boston Corporation Dean Witter & Co.

FINANCE BRIEFS

New York City banks charged average rate of 2.94% on short-term business loans in the first half of December, vs. 2.74% in September, 1951, and 2.45% a year earlier, reports New York Federal Reserve. Average charge is higher now largely because prime rate has since been upped from 2.75% to 3%.

Permission to up interest rates on deposits beyond the present 2% ceiling, asked by New York savings banks, will be ruled on by State Banking Dept. Feb. 6. Approval, Supt. William A. Lyon warned last week, "would cause vibrations throughout the banking structure." Many savings and commercial bank officials, he added, have expressed "deep misgivings over a lifting of the ceiling."

Radio Corp. has borrowed another \$20-million—at 3% on 23-year paper—from an insurance group. Such loans now total \$100-million.

Kaiser Aluminum & Chemical Corp. has completed \$140-million of new financing. Involved: public sale of \$17.5-million of 5% convertible preferred, direct sales to institutions of \$93.5-million of 3½% bank notes and \$29-million of 25-year 4½% mortgage bonds. All but \$40-million represents "new money" to handle the company's huge expansion program.

More trouble for WWP deal: The Securities & Exchange Commission decided to take jurisdiction over the sale of Washington Water Power Co. to a group of public utility districts (BW-Jan. 5 '52, p88). This supersedes the decision of about a year ago not to take jurisdiction. Financing of the sale is already being held up by refusal of the Voluntary Credit Restraint Committee to approve a revenue bond issue.

Another 100,000: American Tel & Tel says its stockholders now total 1.1-million. The company reached the million mark last spring (BW-May 19 '51, p130). General Motors says it, too, has hit a record high: 447,000—a gain of 27,000 holders during 1951.

Monsanto Chemical Co. will soon offer 400,000 shares of new common stock to the public. The \$40-million is to be used mostly for capital expansion.

Mother Bell earned more money in 1951 than ever before, \$377-million for the year ended Nov. 30. That compares with \$351-million for the previous year.



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Sensitive handling; careful compounding to an exact "prescription"—these are some of the factors that make the difference between every day steel—and the *special steels* that set Crucible apart.

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CURRENT ASSETS

(Billions of Dollars)

	Cash	Gov't Bonds	Receivables	Inventories	Other	Total
1939: Dec. 31.....	\$10.8	\$2.2	\$22.1	\$18.0	\$1.4	\$54.5
1946	22.8	15.3	30.7	37.6	1.7	108.1
1947	25.0	14.1	38.3	44.6	1.6	123.6
1948	24.9	14.3	40.8	49.3	1.6	130.8
1949	25.9	16.3	40.3	44.6	1.4	128.6
1950	26.9	19.9	50.0	51.9	1.7	150.5
1951: Mar. 31	26.2	20.4	51.0	55.7	1.9	155.3
June 30	26.8	20.2	50.8	58.6	2.0	158.4
Sept. 30	27.3	20.3	52.5	60.1	2.1	162.3

CURRENT LIABILITIES

(Billions of Dollars)

	Accounts and Notes Payable	Taxes Payable	Other	Total
1939: Dec. 31.....	\$21.9	\$1.2	\$6.9	\$30.0
1946	31.6	8.5	11.8	51.9
1947	37.6	10.7	13.2	61.5
1948	39.3	11.7	13.2	64.1
1949	35.6	9.8	13.1	58.5
1950	44.6	15.5	14.6	74.7
1951: Mar. 31	45.7	16.5	15.2	77.5
June 30	47.2	17.2	15.0	79.4
Sept. 30	48.8	18.6	15.6	83.0

NET WORKING CAPITAL

(Billions of Dollars)

1939: Dec. 31.....	\$24.5	1949: Dec. 31	\$70.1
1946	56.2	1950	75.8
1947	62.1	1951: Mar. 31	77.8
1948	66.7	June 30	79.0
		Sept. 30	79.2

Working Capital Climbing, But . . .

The nation's nonfinancial corporations are continuing to pile up more working capital. But liquidity of business generally is trending perversely downward.

That's the gist of the Securities & Exchange Commission's latest quarterly report on working capital, released last week. Last Sept. 30 found net working capital perched at a new all-time peak of \$79.2-billion—up \$200-million from the previous high three months earlier. Yet corporate liquidity in the 1951 third quarter "continued the decline begun in mid-1950," says the commission.

That just goes to prove it's not the size of working capital that really counts. Composition, as any credit man will tell you, is the crux. And composition lately has been showing sharp deterioration.

Two primary shifts are to blame: (1) rocketing inventories, and (2) soaring "taxes payable."

Current assets on Sept. 30 covered current liabilities only 1.96 times, lowest coverage reported since 1944. The coverage in quick assets (cash, government securities, and receivables) was only 1.21 times, poorest ratio since 1939.

And cash and governments alone equaled but 57% of the current debt load, the narrowest coverage the SEC working capital estimates have disclosed since 1941.

How long this shrinkage in liquidity may continue is problematical. However, signs of a turn have yet to appear. And these signs aren't going to appear until business manages to speed up sharply the conversion of inventories into cash.



DYEING FIRM DOUBLES OUTPUT: AN ABSORBING NYLON STORY

The cloth rolling through this fabric-printing machine rides on another cloth, called a back greige, that absorbs excess dye. Later on in the process, the two cloths part company and the back greige gets a washing to clean off the dye blotted up. Before the process can be repeated, the back greige must have time to dry.

This fabric-dyeing firm found that a back greige made with Du Pont's nylon fibers dries so much faster than an ordinary one that the printing machine's speed can be almost doubled. Hence, very nearly twice the amount of printed cloth can be turned out in a given time.

Nylon back greiges have proved to be more economical, too. Strong and resilient, wet or dry, they outwear ordinary back greiges 5 to 1—yet cost only

about 4 times as much.

In addition to being strong and quick-drying, nylon is light in weight, and withstands deterioration by petroleum oils, soil rot, alkalies, mold and mildew. And nylon fabrics can be heat-set to hold shape.

Nylon is now being used in a wide variety of products—industrial filters, fishing nets, rope, sewing thread, and many others. Perhaps it can help you

increase production, improve your product—or even create a new product. Have you investigated the remarkable combination of properties this Du Pont fiber offers?

NEW BOOKLET: "Nylon Textile Fibers in Industry" contains 23 case histories, shows you how businessmen are using nylon in industry today. Write for your copy. And tell us your fabric or fiber problems. Address Textile Fibers Dept., Room 6514-B, Nemours Bldg., E. I. du Pont de Nemours & Co. (Inc.), Wilmington, Delaware.

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THE MARKETS

Stock Price Indexes (Dec. 31, 1950=100)



Source: Dow Jones & Co., London Financial Times.

Two Economies, Two Markets

In London, the Conservatives' move to tighten money rates plunged stock prices to new lows. On Wall Street, reaction to the President's messages gave new life to bull market.

Whatever Winston Churchill may have done for Britain on his trip to the U.S., he didn't do much for London's stock market. Stock prices this week reached new lows for 1951-1952—even as the New York market was trying to poke through the old bull market top (chart, above).

What seems to have touched off the latest break in the London stock market was the number of prospective new stock issues now overhanging the market. But, of course, there's a lot more to it than that.

The moves that the Conservative government has made to tighten money rates have given the bond market the shivers. Since the new policy began to take effect, several new bond issues have flopped dismally, including a big debenture issue by Unilever (BW-Dec. 1951, p128).

• **Switch to Stock Issues**—This naturally has made stock issues more popular as a means of raising new capital. But in order to sell new stock in a period of tightening money rates, you must make price concessions to attract buyers.

That depresses prices of existing shares.

Another big factor is Britain's sterling crisis, which doesn't exactly put Throgmorton Street into a bullish frame of mind.

Just the same, the steps taken to meet the dollar shortage may have an inflationary effect on commodity prices. Import purchases have been curtailed, to prevent loss of gold. That means less goods for British consumers.

• **Wall Street Goes Bullish**—Action of the New York market offers quite a contrast. Early this week the Dow-Jones industrial average closed as high as 275.40, within a point of the bull-market peak of last September. Standard & Poor's 90-stock index and its index of 50 industrials have already climbed above their 1951 highs.

Yet there are certain weaknesses in Wall Street's year-end rally. It hasn't been a broad move; it has been confined mostly to the high-grade shares (BW-Jan. 19'52, p153). Volume of trading hasn't been very heavy, though it has increased a bit lately.

Anyway, stock prices have risen. And

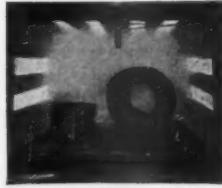


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That's because Carpenter's Application Engineering Service rides along with every bar delivered. A-E-Service is Carpenter's way of working with customers . . . helping them get more than "expected performance" from specialty steels. This is why the Carpenter man seldom takes your application for granted. He wants to *know* about the job. Often, former production or performance records just aren't good enough.

Mill specialists may even tear the job down, then build it up again with steels virtually "tailored" to your needs.

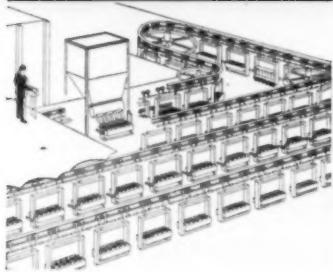
If trends in industry indicate the need for a new steel, that's a job for A-E-Service, too. The fact is, Carpenter customers are often the first to profit from a pioneering program developing new and better steels to accomplish hitherto unheard-of results.

This is A-E-Service . . . a truly different concept of service on specialty steels. This is the thinking and imagination that accompany every bar of Carpenter Steel you apply.



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probably the main reason for their strength recently is: (1) the President's messages to Congress, along with (2) Congress' reaction to the messages.

• **Wall Street Prophecy**—Wall Street is sure there will be plenty of deficit spending in the next few years. This

is partly due to the huge sums necessary for rearmament, and partly because Congress is in no mood to boost taxes. That spells more inflation over the long term. The stock market, as usual, interprets inflation as bullish for stock prices.

Dividends: Still High, But Slipping

Dividends apparently made a better showing than earnings did in 1951. Corporate profits, over-all, slipped back to about \$18.5-billion after taxes, some \$4.3-billion, or 19%, under their record-breaking 1950 level. Cash dividends, however, probably added up to around \$9-billion, down only \$169-million, or 0.2%.

Big Board common shares made an even better showing (table, below). Cash dividends, the New York Stock Exchange reported this week, virtually equaled 1950's record flood. They came to \$5.466-million, off only about \$4-million, or 0.1%.

At first glance this looks like a pretty score. But the record can be deceiving. What happened was a spectacular zoom of dividends in the first half of last year. If it hadn't been for this, the year's total would have been a lot lower.

First-half common dividends on Big Board shares, for example, rose \$362-million, or 17%. In the last half they dropped \$366-million, or 11%. Most of this drop came in the closing quarter, which ran 16% under the 1950 level.

Small companies weren't the only ones that felt the effects of zooming taxes and high operating costs, either. Some big companies, such as General Motors, Chrysler, du Pont, U. S. Steel, and General Electric, voted smaller dividend payments in 1951 than in 1950.

The impact of GM's cut is doubly evident because its payments swelled the 1950 total hugely. The big auto company's whopping dividends year before last, plus du Pont's "pass-along" of its dividend receipts from GM, accounted for about two-thirds of the 1950 second-half advantage over 1951.

Stock Group	No. Issues in Group	Num-ber of Dividend Payers	Dividend Results			Total (000 omitted)	% Change 1951
			1951 vs. 1950 Higher	Same	Reduced		
Aircraft	25	21	13	6	2	\$50,998	+\$43,850 +16.3%
Amusement	23	20	6	9	5	64,431	71,431 - 9.8
Automotive	73	65	24	10	31	555,222	771,142 - 28.0
Building trade	30	29	7	11	11	78,656	83,766 - 6.1
Chemical	81	77	33	21	24	586,945	673,875 -12.9
Electrical equipment	22	21	11	6	4	149,747	169,589 -11.7
Farm machinery	7	7	3	1	3	54,412	61,000 -10.8
Financial	32	31	19	7	5	120,773	117,028 + 3.2
Food products, beverages	70	63	13	30	20	234,274	239,299 - 2.1
Leather, leather products	11	9	2	5	2	19,006	19,198 - 1.0
Machinery, metals	104	100	43	26	32	201,636	201,838 - 0.1
Mining	42	34	22	5	8	222,358	199,246 +11.6
Office equipment	10	9	4	3	2	35,796	34,720 + 3.1
Paper, publishing	36	32	18	7	7	96,893	83,313 +16.3
Oil, natural gas	47	45	29	14	2	879,491	732,299 +20.1
Railroad, railroad equipment	81	61	22	30	12	257,652	243,068 + 6.0
Real estate	10	9	5	2	2	15,948	15,948
Retail trade	70	64	19	36	9	283,151	270,958 + 4.5
Rubber	9	9	7	1	1	50,036	43,585 +14.8
Shipbuilding, operating	11	9	3	3	4	13,206	14,838 -11.0
Steel, iron	38	36	14	13	9	265,340	275,821 - 3.8
Textile	44	44	14	13	17	105,801	96,183 +10.0
Tobacco	16	15	1	7	7	79,897	82,368 - 3.0
Utilities	101	96	42	52	3	792,316	704,907 +12.4
U. S. companies operating abroad	25	22	13	3	6	83,276	73,113 +13.9
Foreign companies	18	16	9	5	2	129,674	110,549 +17.3
Other companies	18	17	7	5	5	39,661	37,522 + 5.7
Total	1,054	961	403	331	235	\$5,466,596	\$5,470,244 - 0.1%

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Today's businessman doesn't trust to luck when it comes to the safety of his business. He knows he must have *sure* safeguards!

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Our Valuable Papers and Accounts Receivable Policy pays for the replacement of all papers, films, documents and other business records and also pays all sums that cannot be collected from customers because the records have been destroyed. Either one or both of these protective features may be purchased.

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DEFENSE

The Stretchout

Production schedules for aircraft, other weapons are cut back, lengthened by new mobilization timetable.

The stretchout of the U.S. military buildup (BW-Jan 12 '52, p19) began to take tangible shape this week. The pattern was set by the drastic cutback in military aircraft goals.

Overall, the aircraft manufacturers were told to shoot for a lower output peak and to produce at that peak for a year longer—until 1955. Top production of finished aircraft, Washington directed, will be about 30% below the level previously planned. Engine production will be around 60% lower than planned.

Specifically, this means cancellation of a number of aircraft orders already placed. It means cancellations of subcontracts for plane components, or spacing them out.

The aircraft program is far and away the biggest chunk of the mobilization—but you can look for a similar scaling back of production schedules for other long lead-time items: tanks, big electronic gear, and the like.

• **The Why's**—There are a number of reasons for the slowdown. Most important: The National Security Council and the military figure there is a good chance of avoiding war with Russia between now and 1955.

But there was also the necessity of facing up to facts. Producers simply weren't coming close to meeting many of their production goals. Bugs in designs, especially for jet aircraft and tanks, still have to be worked out. The machine tool shortage figured to slow other items for another year yet.

Finally, the impact of mobilization on the rest of the economy was proving unexpectedly heavy. There was serious unemployment in Detroit, New England, and other local areas. And a little more materials might keep a lot of firms from going out of business.

• **Subcontractor's Problem**—In solving one angle of the unemployment problem, however, the Pentagon has created another. The question now is what to do about subcontractors who are geared up to the old schedules for plane production. If the sub sticks to his previous timetable, he will finish some of the components for the planes at least a year, perhaps a year and a half, before they are needed. That will mean a big storage problem for the major air-

BUSINESS

craft and engine manufacturers. It will also tie up scarce materials unnecessarily. And it will require special materials allotments for the subcontractors who get ahead of their primes.

On the other hand, if the subs stretch out their schedules to fit the prolonged programs of the prime contractors, many will be operating at half-speed. And with materials increasingly hard to get, there won't be much chance to piece out with civilian business.

• **More Aluminum**—The change in the aircraft schedule will free some materials, particularly aluminum. But civilian goods manufacturers won't get much of it.

Mobilizers are now refiguring aluminum allotments for the first two quarters of this year. They estimate they will be able to divert more than 100,000 lb. of aluminum earmarked for plane production during February and March, even more in the second quarter. (Second-quarter allotments already have been totted up by Defense Production Administration.)

But most of this metal will go to other military programs—for tank engines and transmissions, radar equipment, ammunition, and missiles. Whatever is left over, if any, will go into a reserve kitty to relieve hardships of civilian users.

Beyond the second quarter the principal effect of the cutback will be to hold down aluminum requirements for aircraft close to present levels. Other military needs for aluminum are still climbing, but they won't put the total military take anywhere near the dizzy heights previously expected.

- **More Screening**—Aluminum for aircraft isn't the only metal getting a review for the first and second quarter. DPA will give all metal requirements of the armed services another combing with its new screening organization—in addition to screening given by the staff that reviews all metals requirements, both military and civilian.

Unlike the requirements staff, which looks into metals demands only when it is passing on quarterly allotments, the new screening group, headed by deputy DPA administrator William L. Campbell, keeps tabs on military needs and consumption of metal on a continuing basis.

• **Fait Accompli**—The Campbell committee already has talked the services into scaling back their ammunition program. The military had scheduled an enormous increase in ammunition production starting in the second quarter. What alarmed Campbell and his aides was that the stepped-up output would take nearly half the copper products,



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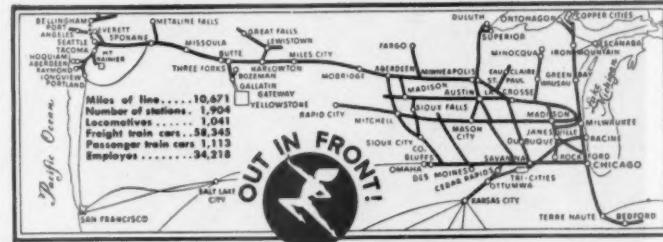
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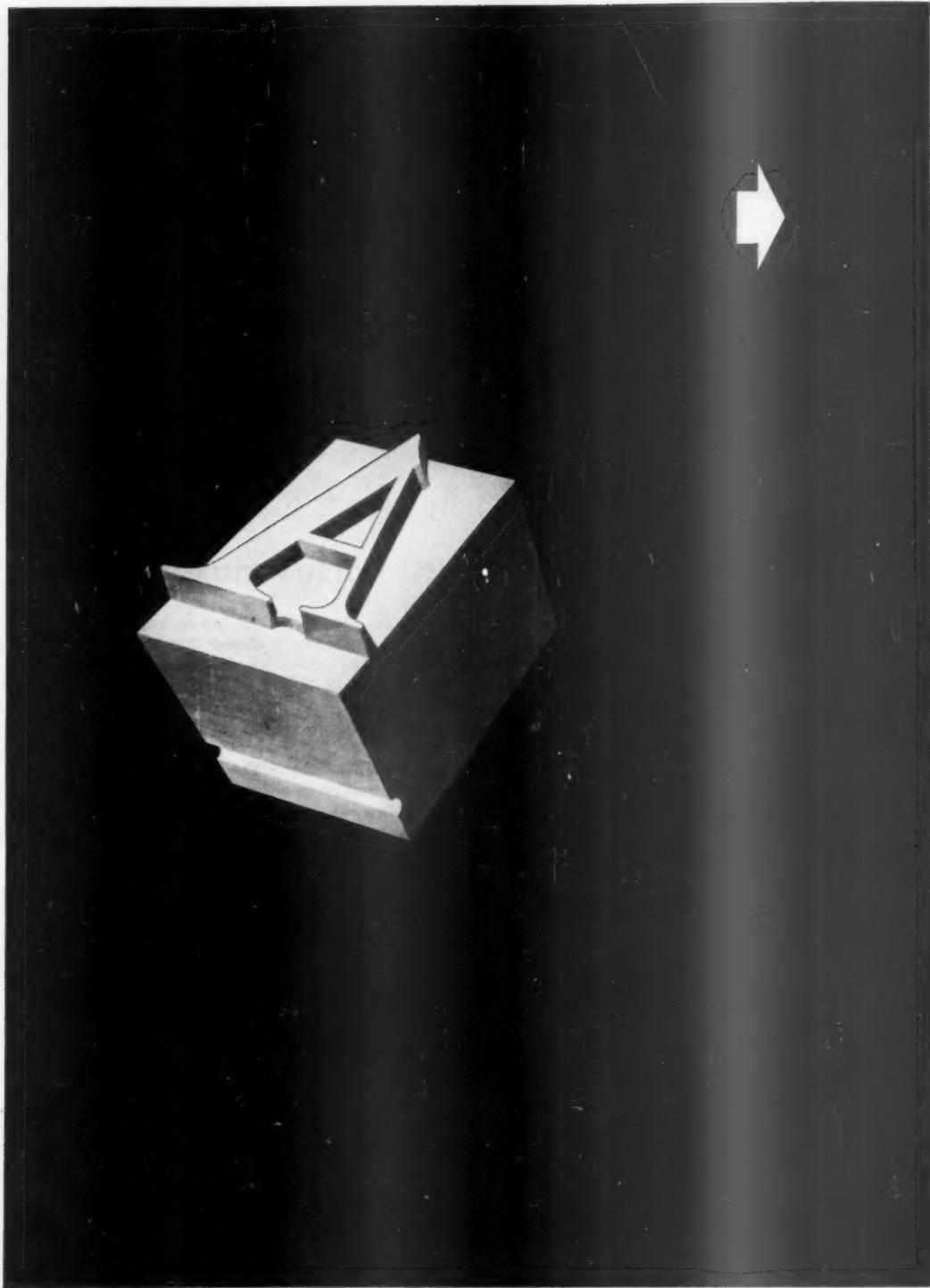
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The following are actual on-the-job comments from the Fort Wayne Plant, Motor Truck Division of International Harvester where Sheffield Precisionaire gages are on the job.



SUBJECT: Differential carrier reaming operation.

Does air gage and quality control chart help?

FOREMAN: "They enable us to know where we are. Quality is improved, resulting in better pinion cage assembly fit."

OPERATOR: "It's the best thing we ever had. We can see gradual size change and be on guard to know when to change reamers. I have no worry about scrap or rework."



SUBJECT: Ring gear boring operation.

Has air gage and quality control chart been helpful?

FOREMAN: "Scrap was reduced from 3% to practically nothing. Improved method of setting boring tool and redesigned facing tool were developed. Air gage check is much faster than old method."

OPERATOR: "We know where we are all the time."

For more information about Precisionaires, other Sheffield products and services write to "Customer Consultation."

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chiefly in the form of brass, that would be produced in the second quarter.

They found that the services planned to keep ammunition production at this level for a comparatively short period—to get it all in a hurry. After flatly rejecting this proposal, Campbell persuaded the brass to schedule ammunition at about one-fifth the proposed rate over a longer period.

Then Campbell jumped on other military requirements estimates. That's how he cut the proposed take of structural steel in the second quarter about in half. Military programs all will get the same kind of going over.

CHECKLIST: Defense Regulations

The following listing and condensed description cover all the materials and price-control regulations issued by the defense agencies during the preceding week.

Full texts of the materials orders may be obtained from National Production Authority, Washington 25, or from any Dept. of Commerce regional office.

Full texts of the price orders may be had from the Office of Price Stabilization, Washington 25, or from the regional OPS office in your area.

Materials Orders

Plastic-type nylon: Revokes allocation control on plastic-type nylon (does not affect textile nylon). M-45, Sched. 4 revocation (Jan. 15).

Bismuth: Rescinds controls in regard to type and quantity of use of bismuth, but retains inventory controls. M-48 as amended (Jan. 15).

Methyl chloride: Removes allocation controls over distribution of methyl chloride. M-45, Sched. 8 revocation (Jan. 15).

Water wells: Provides a new procedure requiring water well contractors to apply for allotments of controlled materials each calendar quarter. Contractors are required to submit CMP-4C construction applications for second-quarter steel and copper allotments by Feb. 15. CMP Reg. 6, Dir. 4 (Jan. 17).

Packaging closures: Reduces to 35% use of aluminum closures for the packaging of such products as wine, distilled spirits, nonalcoholic beverage drinks, cosmetics, chemicals, etc. Reduces quarterly base quota of the permitted consumption of aluminum closures. M-26 as amended (Jan. 17).

Chrysotile asbestos fiber: Prohibits the use of spinning grades of chrysotile

Ever hear of a tree farm?

Nobody loves a tree like a lumberman.

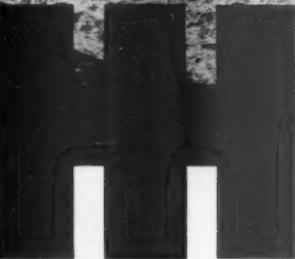
That's why scientifically planted "tree farms" are a major program of the lumber industry.

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Every year the timber growth is greater than the timber cut. Every inch of bark and sawdust is used, instead of the 65 percent waste once common.

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—shaped under pressure from one piece of sheet metal.



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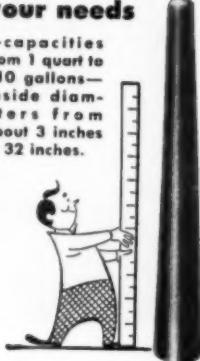


they improve appearance

—streamlined shapes—seamless construction.

they fit your needs

—capacities from 1 quart to 110 gallons—inside diameters from about 3 inches to 32 inches.



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asbestos fiber except for certain specified end uses. M-96 (Jan. 17).

Controlled materials: Revokes five obsolete directions to three CMP regulations concerning status and adjustment of delivery orders for controlled materials. CMP Reg. 1, Dir. 7; CMP Reg. 3, Dirs. 1, 2, and 3; CMP Reg. 6, Dir. 3 revocations (Jan. 18).

Steel distributors: Requires steel distributors to accept Authorized Controlled Materials orders bearing allotment symbols A, B, C, E, or Z-2 in preference to other ACM orders whenever the particular product ordered may be filled from the steel distributor's inventory. M-6 A, Dir. 1 (Jan. 21).

Pricing Orders

Exports: Amends the export regulation to simplify pricing for the export trade. CPR 61, Amdt. 2 (eff. Jan. 16).

Manufacturers: Grants manufacturers who price under CPR 22 the option of establishing ceiling prices for their sales at retail under that regulation. Also permits manufacturers to establish ceilings for new commodities to all classes of buyers in a single procedure under CPR 22. CPR 22, Amdt. 40 (eff. Jan. 19).

Food container and closure paperboard: Sets up tailored regulation for the food container and closure paperboard industry that establishes manufacturers' ceilings at current market levels in conformity with requirements of the Capehart Amendment. CPR 116 (eff. Jan. 19).

Malt beverages: Permits brewers, wholesalers, and retailers, including taverns that make off-premise sales, to adjust their ceiling prices to compensate for increased costs since Korea. CPR 117 (eff. Jan. 28 for brewers and wholesalers; and Mar. 24 for retailers).

Conversion steel: Grants manufacturers using conversion steel a full month to compute added production costs as a basis for ceiling price revisions. CPR 30, Amdt. 29; CPR 22, Amdt. 41 (eff. Jan. 19).

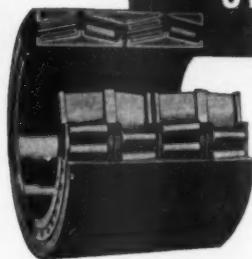
Bolts, nuts, screws, and rivets: Sets up tailored ceiling price regulation covering producers of bolts, nuts, screws, and rivets, which maintains the level of ceiling prices prevailing during the GCPR base period. CPR 118 (eff. Jan. 21).

Benzol and naphthalene: Provides that OPS may adjust a producer's ceiling price for benzol and naphthalene to reflect cost increases after Jan. 25, 1951. GCPR, SR 13, Amdt. 6 (eff. Jan. 21).

Steaks: Permits processors and sellers of specialty steaks, such as chip steaks, frosted steaks, sandwich steaks, etc., to determine their ceilings by the same method provided for other processed



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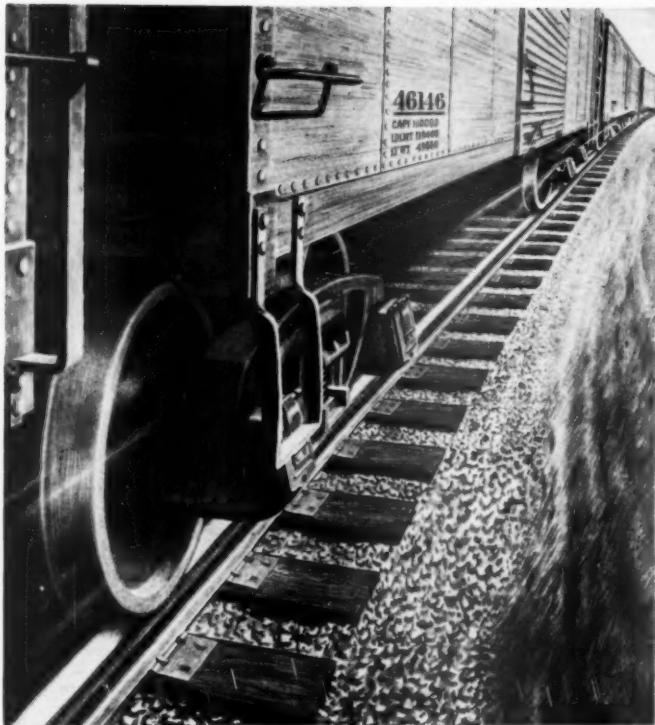
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beef items. GCPR, SR 61, Amdt. 1 (eff. Jan. 19).

Paper shipping sacks: Sets up tailored regulation covering paper shipping sacks produced and sold in the U.S. and its territories and possessions. Freezes the manufacturer's price list or formula at levels established by GCPR except for minor increases on products made from 40-lb. kraft shipping sack paper. CPR 115 (eff. Jan. 19).

Power laundry services: Sets dollars-and-cents ceilings on wholesale laundering services rendered to hotels in Dade County, Florida, which includes Miami. CPR 34, SR 10 (eff. Jan. 21).

Fluid milk: Authorizes district or regional directors of OPS to fix ceiling prices of milk sold by retail stores. GCPR, SR 73, Amdt. 1 (eff. Jan. 14).

Mechanical springs: Sets up tailored ceiling price regulation for manufacturers of mechanical precision springs, metal stampings, and screw machine products. Establishes ceiling prices on the basis of the price-determining method a manufacturer had in effect during the period Jan. 1, 1950, through June 24, 1950, as applied to labor and materials costs as of Mar. 15, 1951. CPR 119 (eff. Jan. 21).

Optometrists: Removes from price control services rendered by optometrists and ophthalmic supplies furnished in filling their own prescriptions. GOR 14, Amdt. 6 (eff. Jan. 22).

Advertising charges: Removes from price control charges for card, poster, and display advertising in and upon all types of transportation equipment and facilities. GOR 14, Amdt. 7 (eff. Jan. 22).

Kaiser-Frazer "Allstate" autos: Sets up basic retail dollars-and-cents prices for the "Allstate" line of passenger automobiles manufactured by Kaiser-Frazer Corp. for sale by Sears, Roebuck & Co., and for factory-installed extra, special, or optional equipment sold with these cars. CPR 83, Sect. 2, Spec. orders 2, Amdt. 1 (eff. Jan. 18).

The Pictures—Cover by Bob Iscar. Bill Clinkscales—112; Encl, TWA—77; Int. News—30; International Refugee Organization—36 (top); Bob Iscar—102, 103, 104; Toivo Kaitila—72; Keystone—26; Stephen Michael—118, 120; Ed Sievers—148, 149; Souligny—184; U.P.—Acme—21 (rt.), 40, 181 (lt.), 186; United Services for New Americans, Inc.—36 (bot. ctr.); War Relief Services—36 (bot. lt., bot. rt.); Wide World—21 (lt.), 181 (rt.); Dick Wolters—44, 48, 50, 52, 54, 80, 84, 85, 88, 90.

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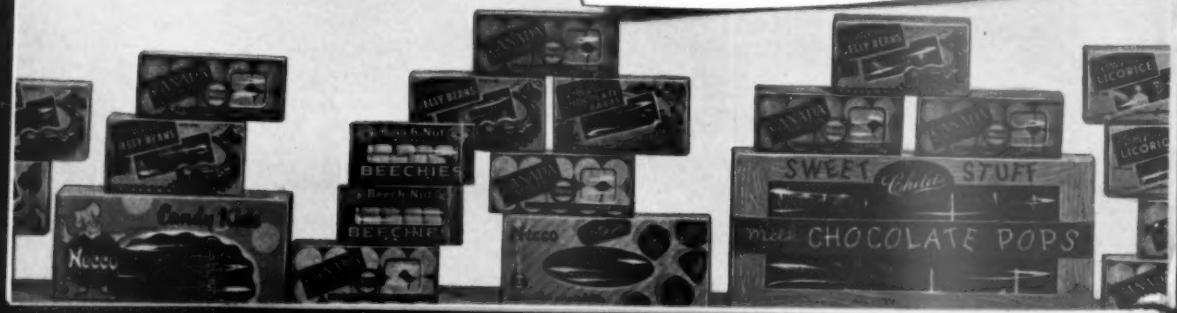
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INTERNATIONAL OUTLOOK

BUSINESS WEEK
JANUARY 26, 1952

A

BUSINESS
WEEK

SERVICE

General war in the Far East looks closer than at any time since MacArthur marched to the Yalu. Both Moscow and Washington are taking an increasingly tough line.

There's no sign now, as there seemed to be last summer, that Stalin wants to ease the tension in the Far East. Vishinsky has openly predicted that the Korean truce talks will fail. Also, he's hinted that the West faces more trouble in Southeast Asia.

Washington's reaction to the shift in Soviet tactics is a decision to retaliate all-out on China if there are new Red offensives either in Korea or Indo-China. In principle at least, Churchill O.K.'d this decision when he was in Washington.

U. S. officials still think that Stalin wants to avoid a big war.

Probably the Kremlin's tough line stems from economic weakness in Western Europe, Western difficulties in the Middle East, and unexpected weakness of U. S. air power in Korea.

The danger is this: Stalin could overestimate the weaknesses and underestimate our willingness to hold the line in the Far East.

The sterling area is sticking together after all. That's the big news from the meeting of Commonwealth finance ministers that closed in London this week.

It was a shift in British tactics that turned the trick. Instead of asking for drastic import cuts, as Cripps did in 1949, Chancellor Butler stressed London's desire to (1) restore sterling convertibility as soon as possible; and (2) encourage U. S. private investment in the sterling area.

Once they had these promises, the other finance ministers agreed to a policy of deflation plus higher exports. Import cuts will be made only as a last resort.

Financial observers in London now think that the sterling area can balance its income and outgo during the second half of 1952.

They are assuming, though, that the U. S. will be importing a lot more raw materials this year than last.

Watch for the moves the Churchill government soon will announce to squeeze inflation out of the British economy.

It hasn't been decided yet just how far to go. There's a struggle going on now within the government and the Tory party.

Churchill himself is for a tough policy. As he has said privately, "You don't need political courage at 77."

But it's hard for Butler and Eden to ignore that aspect.

So it will take Churchill's power to ram a bold program through.

Talk of devaluing the franc has started again in France. It's the result of last year's big foreign trade deficit.

Preliminary estimates put the deficit at nearly \$1-billion, three times the prior year's. French exports lagged badly during the second half of 1951, while the cost of imports was high.

French exporters lay the blame for declining sales on the inflated prices they have to charge. And they expect their sales to keep dropping until inflation is checked.

INTERNATIONAL OUTLOOK (Continued)

BUSINESS WEEK
JANUARY 26, 1952

To stave off devaluation of the franc, the new Faure government may step in with subsidies for exporters—tax exemptions and easier credit.

But it's unlikely that Faure can deal with the root problem—inflation.

His coalition is just as shaky as Pfeiffer's was. To stay in power, he'll have to lean on the Socialists. And they oppose cuts in government spending for social services.

The North Atlantic Treaty Organization will tackle some big problems at the Lisbon meeting slated to start Feb. 16.

• The scheme for a joint European army will be up for approval. The experts are now hammering the project into shape in Paris.

• NATO's "Three Wise Men" will present a revised report on the Atlantic defense effort. This version will urge only a modest hike in European defense spending.

Barring greater international tension, Congress will cut about \$2-billion from Truman's 1953 foreign aid budget. Truman wants to spend \$10.8-billion.

How much this will hurt Europe's rearmament depends on where the cuts are made.

Deep slashes in the economic aid request (about \$2.5-billion) might hurt more than the same cuts in military items. That's because the main threat to rearmament comes from the economic crises in Britain and France. These can't be eased by arms deliveries.

There's a good chance Brazil may find a way out of its hassle with foreign investors.

President Vargas started the trouble by calling for a retroactive ruling that would have frozen the remittances of many investors (BW-Jan.12 '52,p150).

U. S. businessmen hollered murder. The U. S. Council of the International Chamber of Commerce, for one, urged Washington to withhold any new loans or grants to Brazil.

Many Brazilians deplore the ruling. Vargas, too, is said to be surprised at the outcry. Observers figure he made his move mainly to palm some of Brazil's economic woes off on his predecessor's regime.

A multiple exchange rate system might be Brazil's out.

The official rate—18.7 cruzeiros to \$1—would remain for ordinary imports and exports. The rate for capital transactions would be freed. The Bank of Brazil is supposed to be working out a support scheme to keep the free rate at around 30 cruzeiros to the \$1.

U. S. diplomats in India are setting a high figure on aid to Prime Minister Nehru. They're talking about giving the Indians a total of \$1-billion over the next four years (BW-Jan.12 '52,p148).

That's what they think it will cost to keep India—and probably the whole of Asia—from going Communist.

But the plans for India aid are causing hard feelings elsewhere. The Pakistani don't like it because so far they're down for only \$8-million to \$12-million in U. S. help.

BUSINESS ABROAD



IN 1949 Cripps could fall back on devaluation, but . . . IN 1952 Churchill must rely on deflation plus U. S. aid.



Economic Crisis Still Faces Churchill

The British economic crisis has not been solved—not by anything that came out of the Churchill visit. And Churchill can't turn to devaluation for a solution, as the Attlee government did in Britain's 1949 crisis. So it's almost certain that more United States aid will be needed to save Britain's arms program from being cut way back.

Churchill got something for the British economy, of course. The U.S. steel that Churchill was promised (1.2-million tons) will help Britain's export industries as well as its armament plants.

The U.S. will spend about \$50-million on Malayan tin this year, against a piddling amount in 1951. And Churchill accepted U.S. prodding as a challenge for a quick boost in Britain's coal output.

- **Gold Drain**—But Britain's gold losses over the next six months still could

total about \$1-billion. The only immediate offset to this staggering loss is the \$300-million that's been earmarked for London out of mutual security funds. On this reckoning, London's gold reserves could drop \$700-million by June 30; that would bring them down to about \$1.6-billion.

When London's gold kitty reached the \$1.6-billion level in 1949, British treasury officials knew that devaluation was inevitable. Before Chancellor Cripps and Foreign Minister Bevin left for the Washington talks in September, 1949, they had already decided to devalue. The aftermath is well known: Instead of losing gold, the Bank of England began to pull it in. And the process lasted until mid-1951, when reserves reached \$3.8-billion.

- **Same Cure No Good**—For the Churchill government, the devaluation

cure won't work. Devaluation to a lower fixed rate would merely aggravate the British problem. In 1949 the problem was to find markets for Britain's goods; devaluation worked because it lowered the price of what Britain had to sell.

But the problem today is a production problem. Just when the economy is overloaded, devaluation would force Britain to sell even more goods in return for essential imports.

- **Plus Signs**—There's a chance, of course, that the worst of the pressure on London's reserves has passed. For one thing, Chancellor R. A. Butler's \$980-million cut in British imports is being felt now.

It's likely, too, that sterling area imports from the U.S. and Western Europe have started to drop. For example, with skyrocketing wool prices



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see Clues on page 186

in 1950, Australians pushed their buying way up during 1951. This kind of spending has tapered off by now.

This week the Commonwealth finance ministers agreed in London that the sterling area must close the gap between income and outgo, even if that meant tighter import controls. The results of this decision won't be felt, though, for another six months.

Also, there's been some improvement in Britain's terms of trade. The prices of imports have started to drop a little (from an index figure of 141 last May to 134 in November), while the prices of exports are still going up.

In addition, there's a chance that speculative pressure on the pound will be reduced soon. This pressure is partly based on what the British call "lags and leads."

When the pound looks weak, as it has since last September, foreigners who hold sterling try to get rid of it as fast as they can. At the same time British exporters delay their dollar collections as long as they can, in the hope of reaping more pounds. But foreigners who do business in Britain can stay out of sterling only so long. And British exporters have to make their collections at some point, especially when credit is as tight as it is today. Pressure on the pound from forward buying of sterling has been reduced just recently by the opening of the forward exchange market in London.

The timing of the \$300-million payment of U.S. aid funds could have a big effect on speculative pressure. British officials would like the money as soon as possible to bolster the reserve position. One hitch: Churchill prefers that the payments should be completely divorced from his visit, therefore put off as long as possible. The British prime minister thinks this is good politics, both at home and in the United States.

• **Long-Range Gloom**—But you can add up all the favorable factors and still not see any hope of a halt to the drain on Britain's gold reserves, let alone a reversal of British fortunes like that which followed devaluation. In fact, Churchill has a choice only between internal deflation and, as a last resort, big cuts in the arms program as now planned.

Part of the deflationary program is in effect. Butler's credit squeeze already has taken some of the fat off the economy (BW-Jan. 12 '52, p149). More deflationary steps are in the offing: cuts in the government's nondefense spending, perhaps including food subsidies; cuts in private capital investment. These moves should make more goods available for exports.

• **Yes and No**—Some U.S. officials, especially in the Treasury, think there's

a good chance this deflationary policy will solve the British crisis. And many feel that, if it doesn't, there'll have to be a still bigger cut in British living standards. Meanwhile, they favor a wait-and-see attitude.

On the other hand, many officials in the Mutual Security Administration and the State Dept. fear deflationary measures won't do the trick. If deflation is pushed too far, they say, it will do more harm than good. As they see it, the U.S. will soon be faced with the choice of giving more aid to Britain or being content with a smaller British defense program.

• **A Long View**—What's more, some officials in State and MSA think it's time for a good look at the whole problem of British economic survival. They don't see much point in letting Britain stagger from crisis to crisis, then rely on emergency aid from the U.S. It would be worth-while, they say, to examine some basic solution, including the idea of an economic union between the United States and the British Commonwealth.

State and MSA officials hoped solutions like this might be studied by an informal U.S.-British team sponsored by Truman and Churchill. But the Treasury put its foot down, and the study plan has been dropped.

• **Immediate Problem**—Actually, both State and MSA are much more worried, even jittery, about Britain's immediate problems.

If the British crisis should happen to get worse by spring, rather than easing up, the whole Atlantic defense effort would be in danger. And they have no confidence that pre-election politics will permit the kind of emergency program that is needed to save the situation.

There's no doubt that Churchill had this in mind, too, when he spoke to Congress last week. As tactfully as he could, the 77-year-old prime minister tried to sell congressmen the notion that Britain will cut its cloth to meet nondefense needs, but that the U.S. may have to carry more of the cost of British rearmament. To make this idea more palatable to Congress, Churchill promised a tighter United States-British line on the Far East, and he gave way to the United States on the Atlantic Command.

In a sense, Churchill was combining the job that Cripps and Bevin did in Washington in 1949 with the job he himself had done in 1940 and 1941 in selling Roosevelt first on the plan for swapping U.S. destroyers for British bases and then on lend-lease. Ultimately, all he could fall back on was his own personal prestige and the fact that U.S. security still leans heavily on a Britain that's both solvent and armed.



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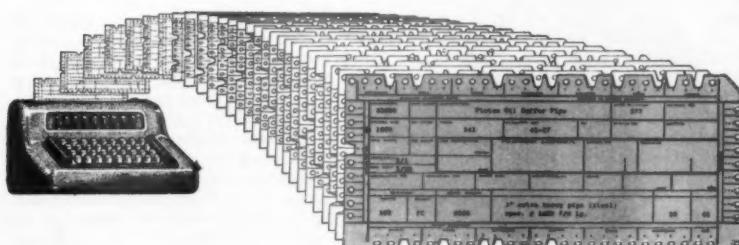
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Tuna Industry Sends S.O.S.

It was ruined in two years by foreign competition, aided by tariff loopholes. Now the tuna boat men want the holes plugged so they can go back to work.

Take an \$80-million U.S. industry, largely regional, employing up to 18,000 persons, that's fast going broke. Figure it a little overexpanded. Add a flood of cheap imports, spiced with a pincer of U.S. foreign policy. Mix in lobbyists, foreign businessmen, and garnish with the State Dept. It makes a fine kettle of fish to take to Congressional hearings in an election year.

Within the next two weeks, the Senate Finance Committee will take up the case of the U.S. tuna fish industry. Tuna men are pleading for relief from imports; they've managed to get a 3¢-a-lb. duty through the House. The lines are drawn for a snappy fight in the Senate and the White House.

• **Vicious Circle**—The kicker comes when you figure that the U.S. has helped build up the foreign producers that are causing the trouble. The tuna problem is a neat example of the kind of jam the U.S. is getting into more

and more. Former enemies and allies get U.S. aid to bolster their economies. They try to sell in the U.S. to earn badly needed dollars. Then a domestic industry gets hurt.

The tuna industry is the largest canned fish industry in the U.S. Production of canned tuna and tuna-like fishes (bonita, yellowtail, albacore) normally runs from 7-million to 9-million cases. Yet today the industry is dead. About 75% of U.S. tuna canning capacity, almost all of it in Southern California, is idle. Of 250 big tuna clippers sailing out of San Diego, 210 are tied up (picture, above).

Booming imports of fresh and frozen tuna from Japan and Peru, plus some from Ecuador, Costa Rica, Panama, and Canada, have taken over one-third of the U.S. market.

• **Buildup**—Here's how the tuna industry got in its present fix:

U.S. tuna fishermen began creating a

mass market for their product back in 1926. A lot of money went into promotion. U.S. consumption bounced from 65-million lb. in 1931 to about 380-million lb. in 1951.

Tuna clippers, ranging up to 550 tons carrying capacity, made their appearance in the 1930s. Before that, the catch was made by small, two-man "jigboats," fishing seasonally along the Pacific Coast. But the market needed a year-round supply. Big, 20-man clippers that could fish as far south as Peru, staying at sea for four months, were built.

The 250 ships in San Diego harbor are to all intents and purposes the U.S. tuna fleet. Each boat is tied by contract or verbal agreement to a cannery; the catch is divvied up on the basis of "shares"—several for the captain and owners, one each for fishermen. Some tuna boat men have been known to make \$17,000 a year on a single share. But the average man, insists the tuna boat association, earns about \$4,700.

There are some 40 canneries in the U.S. that handle tuna. But the business is strictly regional. Fully 90% of the pack has been concentrated in 18 canneries in the San Diego-San Pedro area.

• **Foreign Fish**—Japan entered the picture in the early '30s with tuna canned in oil. Domestic producers hollered, got a prompt hike in the import duty from 30% ad valorem to 45%. After that, the industry jogged along until World War II, when half the fleet was drafted into naval service.

But the armed forces wanted canned tuna and spent money abroad to augment the limited domestic supply. Peru got funds to start a fishing and canning industry. In 1943 the U.S. signed a trade deal with Mexico that cut the tariff to 22½%. At the time, the slash meant little—Mexico produced only a slight amount of tuna.

But after the war the Mexico agreement became a general U.S. tariff figure, and Japan was brought under our most-favored-nation clause. The Japanese had lost their entire fishing fleet. We advanced money to rebuild it; we couldn't let the defeated people starve. But Japan needed dollar earnings, too, and its canneries began shooting for the U.S. market.

• **Two Rough Years**—The summer of 1950 brought the situation to a climax. The U.S. and Mexico scrapped their trade agreement; the tariff on tuna canned in oil went back to 45% as of Jan. 1, 1951. With six months' advance notice of the hike, Japanese and other producers dumped a whopping 36.4-million lb. of tuna canned in oil during 1950. That glut is one of the big factors in today's problem.

For 1951 the foreign producers

found a handy loophole. They cut down canned tuna, began to ship big amounts of frozen tuna (duty free) and bonita canned in oil (15% duty). Neither of these tickles the U.S. palate like tuna in oil, but they are sold on a price differential basis. The big consumption is institutional—"tuna" sandwiches in restaurants and at soda fountains.

All other fresh and frozen fish are covered by U.S. tariff laws. But the tuna was overlooked. Until the late 1930s, you couldn't haul a fish from Japan to the U.S. and have it still edible. Now, modern brine-freezing makes it easy.

• **Plugging Loophole**—The American Tunabot Assn., an organization of clipper owners, started campaigning for a duty on frozen tuna in mid-1951. (Thanks to the tariff hike on canned tuna, imports slid way down to 6-million lb. from the 1950 high of 36-million lb.) Rep. Clinton McKinnon (Dem., Calif.) took the lead in getting a bill for a 3¢-a-lb. duty through the House. The bill reflected tuna boat men's thinking that they didn't mind if the foreigners took a chunk of the market—provided it was a small chunk. The bill called for a sliding scale—15% ad valorem for "normal imports," 45% for everything above.

Japanese business and fishing people got into the act quickly. They descended on the West Coast last fall with demand for a "business level" agreement divvying up the U.S. market. They offered to bear part of the cost of a \$500,000 advertising campaign to push tuna in 1952. But cannery officials and boat men wouldn't buy. They said the deal would run afoul of the antitrust laws.

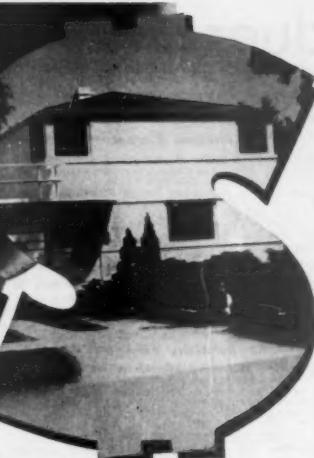
• **Peacemakers**—The State Dept. is unhappy about the developing fight. It fears a slap in the face to Japanese business, and it doesn't want to ruffle good neighbors in South America.

Others will try to stop—or tone down—the tuna tariff. Some importers, businessmen with foreign fishing interests, and the Columbia River Packers Assn., Astoria, Ore., will fight hard for the status quo. The Columbia River people, who usually handle other fish products, have been canning the bulk of the frozen tuna imports.

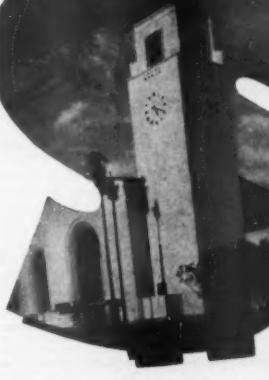
• **Canners' Interest**—At first glance the fight seems to stack up as one between the boat men and the canneries, who are buying cheap foreign raw material for processing. The Japanese tuna comes in at \$250 a ton, some Peruvian tuna lays down on the West Coast at \$200, U.S. tuna costs \$300.

Actually, the regular Southern California tuna canneries have bought little abroad. Over-all, they're opposed to the frozen imports. Wade Ambrose, vice-president of Westgate-Sun Harbor

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Packing Corp. (Breast O' Chicken Brand), puts it this way:

U. S. canners feel foreign tuna is an uncertain source of supply at best. And it could wreck the home source of supply, someday leave the canners with nothing to can. What hurts one branch of the tuna industry hurts everybody.

• **No More Patching**—But the canners want the whole tuna tariff structure revised, not just on frozen imports. Everything was fine, they say, when the tuna canned-in-oil tariff jumped last year. Then frozen stuff, then bonita started coming in. Who knows what will come next? They say there's no use in plugging one hole in the dike when pressures will spring two or three leaks elsewhere.

BUSINESS ABROAD BRIEFS



An old-hand diplomat, Robert D. Murphy, will be the first postwar ambassador to Japan. He's spent 30 years in public service; one of his big jobs was working behind the scenes politically to open the way for the Allied landing in North Africa. Murphy will have to smooth relations between a sovereign Japan and U. S. military forces stationed there, guide Japanese away from too-close contact with Red China.

Foreign investors are being attracted to Turkey, thanks to the government's new rules for outside capital (BW—Aug. 18 '51, p146). Projects under discussion include a Dutch vegetable oil plant, a Swedish chemical plant, a German fertilizer outfit. U. S. businessmen are looking at the possibility of setting up an antibiotics plant, a DDT plant.

Du Pont has licensed seven companies in West Germany, and is dickering with an eighth, to manufacture nylon under its German patents.

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BARTON, BARTON, DURSTINE & OSBORN, INC.	70	Agency—Little & Co.		Agency—Sanders & Thomas, Inc.	
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BARTON, BARTON, DURSTINE & OSBORN, INC.	70	MAGNAFLUX CORP.	128	STATE OF COLORADO.	137
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BARTON, BARTON, DURSTINE & OSBORN, INC.	70	MEAD CORP.	96	Agency—H. B. Taylor, Inc.	
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BARTON, BARTON, DURSTINE & OSBORN, INC.	70			WHEELING CORRUGATING CO.	138
BARTON, BARTON, DURSTINE & OSBORN, INC.	70			Agency—Cunningham & Walsh, Inc.	

The Economic State of the Union

The nation's economic health is sound, says the President, and the outlook is good.

In reporting to Congress, Harry Truman was able to marshal some impressive facts: 61-million employed, total production of goods and services up 8% in the year, wholesale prices down from post-Korean peaks, the rise in the cost of living slowing up.

Whatever else may be said of this Economic Report, it is a skillfully prepared document. And well it might be, for the President and his advisers were not merely writing a diagnosis and remedy for the nation's economic health—they were preparing a platform for the Presidential sweepstakes later this year.

Consider in this light some of the highlights of the report:

- The President calls for economy in government spending—but not “false economy.” Having thus genuflected in both directions, he goes on to defend expenditures that, judged by the \$14-billion deficit he anticipates in fiscal year 1953, are very liberal. He wants \$5-billion in new taxes to help fight inflation. At no point does he recognize that in the present situation added taxes themselves can be inflationary.

- Abolition of the so-called “sliding scale” of farm price supports is urged in favor of high fixed ones. Here the President is gambling that he knows the sentiment of the grassroots farmer better than do leaders of the Farm Bureau Federation and the National Grange, who oppose such action.

- Expansion of various federal programs in social security, health, education, and resource development is called for, despite an avowed purpose to retrench in favor of defense.

- Tightening of price control powers is on the list. Prospects are that Congress will not take his advice. Nor is there any evidence that it should. Playing politics with price control will be minimized by leaving the law as it is.

- Greater saving by the public is called for, but no evidence is offered that the government will help. The report refers to the savings bond drive as the Administration's contribution to the goal of increased savings. Despite urging from many sides, the Treasury so far has remained impervious to suggestions that savings bonds be “sweetened up” for the investor. In 1951, a year of large public savings, redemptions of E bonds alone exceeded sales by \$67-million.

One major economic idea dominates the report: expansion of productive capacity. That is the solution for the guns vs. butter issue, for the problem of inflation. It is a doctrine of expansion unlimited.

In this matter the President's report faithfully reflects the views of Leon Keyserling, chairman of his Council

of Economic Advisers. Keyserling, it should be said, has been right more often than his critics in gauging the growth potential of the postwar economy even though he has been willing to get the growth at the cost of some inflation. The present rapid expansion of our productive facilities gives him no pause. In looking ahead to 1953-1954, when the defense effort passes its peak and planned federal spending is cut back \$25-billion, Keyserling foresees no more trouble than after World War II, when a larger arms cutback was readily offset by increased consumer and business spending.

This could happen, but the analogy is faulty. At the end of World War II there was a backlog of postponed consumer and business demand that has no apparent counterpart in 1953-54. In so lightly passing over what is going to be an honest-to-goodness problem for American business, the Economic Report does a national disservice. Nor can the problem be banished by relying on government programs that can only involve business further with government to the permanent detriment of business.

Farmers' Thinking

By tradition, the farmer is set in his ways and slow to change his mind. It is good news to see signs of new farm thinking about two matters that worry business—farm subsidies and railroad regulation.

Farm subsidies, a depression device, have gone on through the longest, biggest boom this country has ever known. During that boom the value of the farmer's dollar has, like everybody else's dollar, been cut in half. The farmer is beginning to put the two things, subsidies and inflation, together. When the Maryland Farm Bureau met recently in Baltimore one of its leaders recommended reductions in government spending and added, “We're including agriculture in that.”

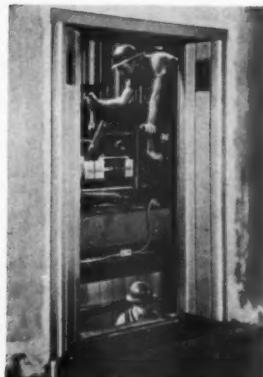
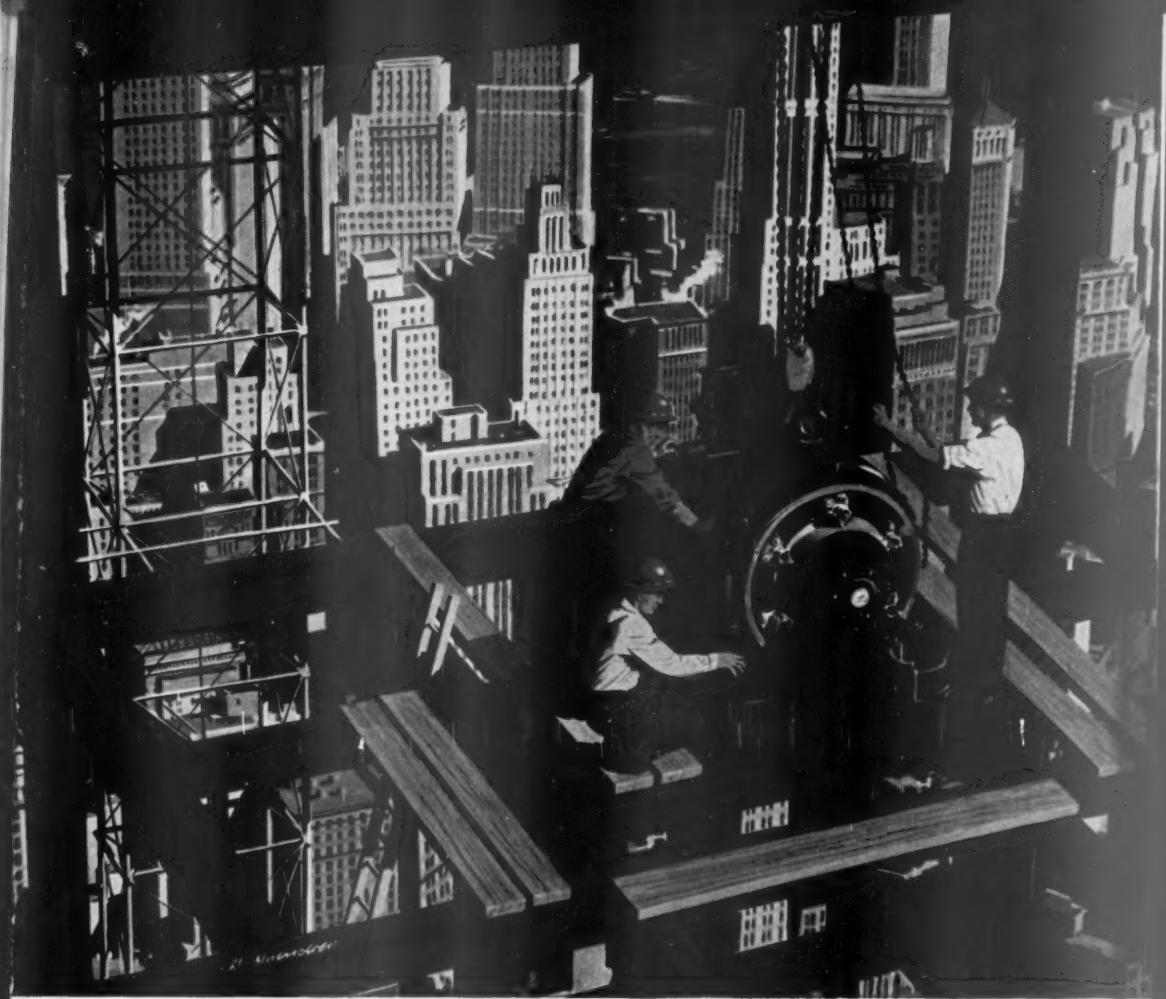
Railroad regulation was one of the causes that first gave the National Grange real influence in this country. Its farmer members beat the drums for national rate-setting back in grandfather's day when the government was weak and the roads were strong. To their minds railroading was “clothed with a public interest,” and the government had a right and duty to regulate it.

Meanwhile, the railroad problem has changed. The strong giants of 1876 are hardly that today. The Grangers know it. Railroad bankruptcy means government ownership or government subsidy. “Neither solution is tolerable,” they say. They have called for a recognition of the problems the roads face today.

Together, these two statements from responsible spokesmen in one of the nation's most powerful economic blocs make heartening reading. Is a new day dawning?

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